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MODERN BUSINESS

THE PRINCIPLES AND PRACTICE OF COMMERCE, ACCOUNTS AND FINANCE

PREPARED AND EDITED UNDER THE DIRECT SUPERVISION
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ACCOUNTING SYSTEMS

A DESCRIPTION OF SYSTEMS APPROPRIATE TO DIFFERENT KINDS OF BUSINESS

BY

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EDITOR'S PREFACE

To understand properly any accounting system one must begin at the bottom, with the initial transactions of a business, and trace and analyze every step through to the culminating point. Then, and not before, can one be in a position to suggest either improvements or a complete reconstruction of the system. In this volume the author has put before the reader various typical systems and has explained their workings in detail and the results achieved by their operation. It would be impossible in a single volume to describe all the systems that are in use or that might be recommended by practicing public accountants. This volume attempts no such task. Its main purpose is to enable the reader, by numerous concrete illustrations, to get a grasp of the underlying principles of system-building and so to be able to appraise justly any system in operation, to suggest needed improvements, or to create a new system if the old is found inadequate.

Any business man will find the volume worthy of careful reading, for it will give him a broader view of the working of his own system and enable him to improve it from time to time. To practicing accountants it will be valuable because of its handy references for many typical financial, mercantile and railroad organizations. To the student of accountancy it will serve as a guide and text book, illustrating and supplementing the lessons taught in Volume III, ACCOUNTING THEORY

AND PRACTICE, and Volume XI, AUDITING AND COST ACCOUNTS.

The author is a successful practicing accountant who has had much experience as a teacher of adults in university classes. The following chapters, supplementing Doctor Moxey's work, were written by the specialists named below:

Chapters IX and X, on the accounts of banking institutions, by Mr. Howard McNayr Jefferson, staff lecturer on banking practice in New York University School of Commerce.

Chapter XI, a system of accounts for a brewery establishment by Mr. Otto A. Grundman, special lecturer in the New York University School of Commerce.

Chapters XXI–XXIII, on the accounts of estate executors and administrators, by Mr. Harold Dudley Greeley, staff lecturer in the New York University School of Commerce.

There would have been little demand for a volume of this sort a dozen years ago, for few business men then realized the importance of system in the record of their transactions. But during the last decade, largely owing to the intelligent activity of public accountants and to the educative influence of their organizations, the importance of scientific system-building, as well as of scientific business management, is beginning to be appreciated.

JOSEPH FRENCH JOHNSON.

TABLE OF CONTENTS

CHAPTER I.

INTRODUCTION.

CHAPTER II.

BUSINESS OF A BUILDING AND LOAN ASSOCIATION.

CHAPTER VI.

LIFE INSURANCE.

CHAPTER VII.

ACCOUNTING SYSTEM OF A LIFE INSURANCE COMPANY.

CHAPTER VIII.

FIRE INSURANCE ACCOUNTING.

CHAPTER IX.

BANK ACCOUNTING.

CHAPTER X.

BANK ACCOUNTING (*Continued*).

CHAPTER XI.

BREWERY ACCOUNTING.

CHAPTER XII.

THE DEPARTMENT STORE.

CHAPTER XIII.

DEPARTMENT STORE ACCOUNTING.

CHAPTER XIV.

GAS ACCOUNTING.

CHAPTER XV.

GAS ACCOUNTING (*Continued*).

CHAPTER XVI.

RAILROAD ACCOUNTING.

CHAPTER XVII.

RAILROAD ACCOUNTING (*Continued*).

CHAPTER XVIII.

RAILROAD ACOUNTING (*Concluded*).

CHAPTER XIX.

STREET RAILWAY ACCOUNTING.

CHAPTER XX.

MUNICIPAL ACCOUNTING.

CHAPTER XXI.

EXECUTOR'S WORK.

CHAPTER XXII.

ESTATE BOOKKEEPING SYSTEM.

CHAPTER XXIII.

ENTRIES UNDER SYSTEM.

CHAPTER XXIV.

FINAL ACCOUNTING.

ACCOUNTING SYSTEMS

CHAPTER I

INTRODUCTION

1. *Installation of accounting systems.*—The proper installation of accounting systems requires an exacting and difficult training, the power to accurately analyze new situations, to conduct independent research, and to judge intelligently of the relative value of data. A successful accounting system is one created to meet the particular needs of the business for which it is intended, and not a general system forced on the business regardless of its individual requirements. Many accountants are confused concerning the principles which should govern the construction of an accounting system. The public at large is completely ignorant upon this matter. As a consequence, many concerns do a flourishing business in installing "accounting systems" which are built up around some mechanical device, such as a system of filing cards or other patented article. Such firms make a practice of building their accounting systems around their product and making the business fit the system, regardless of considerations of economy and efficiency. Their work is most unfortunate, for the injury continues as long as the system is used. Unnecessary expense is inevitable; losses and friction can hardly be avoided; and the operation of the entire plant is necessarily hindered and restricted.

The professional accountant should have no hobbies, nor be prejudiced in favor of any mechanical device or system. He should approach the question with an open mind, studying it as a scientific problem, and diagnosing for its needs as the physician does for an ailing patient. He must thoroughly acquaint himself with the mechanical operations of the business. He must understand the character of the records which are desirable and then, as a final step, construct a system of accounts which will present accurately the results of operation and show clearly those facts which will be of value to the executive officers.

2. *Accounting systems similar.*—To approach the study of modern accounting systems without a definite plan of work, or some intelligent and logical grouping of the many forms of accounts in common use, would lead to unsatisfactory results. While each system differs from every other in minor particulars, yet a large number of them are so similar in form as evidently to have been created to meet similar needs. Instead, therefore, of a multitude of systems each different from the other, we have but a few groups radically different from one another, each of which is in turn composed of the accounting systems for many businesses which are almost identical. The explanation for this close similarity between accounting systems is found in the fact that the organization of these businesses is so alike and the problems of production and distribution so similar that the same accounting system will suffice, with slight alterations, for each unit within the group. The reason why all the systems do not follow the same general lines is not due to the whim or caprice of the accountant, but is because of the radical difference in the problems which must be solved.

3. *Essentials of an accounting system.*—The accountant in installing his system follows a few general principles very simple in their character and scope. He builds his accounting structure upon the humble foundations of double entry bookkeeping. The general principles of debit and credit should always be observed and utilized for the recording of every business transaction. He selects such books, from those in common use in double entry bookkeeping, as may be useful in the particular situation with which he has to deal. Those which have no place in the business he discards, for the keeping of such books would serve no useful purpose and be a useless expense. Around these general books he builds up such auxiliary books and records as in his judgment will secure the proper handling of the business of the concern and be best fitted for the summarization of its operations and the recording of its results. He uses vouchers, time cards, inventory sheets, pay rolls, and every other device known to modern accountancy, whenever they will serve a useful purpose. His aim, throughout his work, is to secure a system insuring the most accurate records, giving the most illuminating view of the condition of the business, and requiring the minimum amount of expense and time. This book has been planned with a view to showing how this can best be accomplished.

Where any of the forms or books referred to are not in such general use as to be familiar to the reader they are reproduced, in order that he may have an accurate knowledge of them. The businesses are considered in the order of the difficulty of the accounting problems which they present, the simplest organizations are studied first, and the most difficult left until the last. Each accounting system discussed, therefore, logically

follows that which has preceded it. Each business considered is, moreover, a type of many other industries whose accounting systems are almost identical. We find, for example, that the accounting system of a trust company or a savings bank is in most respects like that of a bank; branch store accounting is an almost direct adaptation of the accounting system of the department store; and the electric light company and the water company use systems almost identical with that of the gas company.

4. *First group of accounts.*—In private accounting the natural method of treatment is to consider first those concerns which do a strictly cash business, and whose accounting systems, therefore, require only those general books which deal with cash transactions—the cash book and the ledger. The first records the receipts and payments of money in chronological order, while the second classifies the records and shows the nature and extent of the assets and liabilities of the institution. The ledger is used because it is a convenient way of rearranging under certain accounts the records originally shown by the cash book. This, in brief, is the accounting system of the building and loan associations, of insurance companies and banking institutions. Upon this foundation is built up a superstructure of subsidiary books and records—some financial, others merely statistical—adapted to meet the requirements of each business.

5. *Second group.*—The second general grouping of private accounts consists of those businesses which in addition to a cash business deal also on credit. In such businesses the accounting system is necessarily more complex than in a strictly cash business. In addition to the cash book and ledger the accountant installs a

purchase book and a sales book. The former is used for keeping a record of goods received from various vendors, and the latter records the disposition of the goods by the company to sundry customers. Finally, in addition to the merchandise books, most businesses in this group keep a journal for recording transactions other than those connected with the purchase and sale of goods and the receipt and payment of money. In this book is recorded the entries showing receipts of notes from customers and the giving of notes to creditors, and the closing entries to show profit and loss for any given period. The journal also furnishes a convenient place for making adjusting entries in correcting errors which may have been discovered in the other books. Around these principal books are built up a system of auxiliary books which owe their existence to the convenience and saving which they effect. This is the skeleton of the accounting system of the retail and the department stores and of all selling and manufacturing concerns.

6. *Subdivision of the second group.*—It seems advisable to make several subdivisions of this general group. The accounting for selling organizations follows closely the general lines already laid down. Those businesses, however, which are engaged in manufacturing find it advisable to keep an accurate account of the detailed cost of production. This is done by a system of cost keeping, which is in reality a set of subsidiary records, whose results are summarized in the principal books. Cost keeping is founded upon well-established principles. The various methods of keeping costs, and the relative value of each method, are discussed in detail in Volume XI of *Modern Business.*

7. *Third group.*—The third group is composed of

public utility corporations. These businesses use the same general books as do all other industries, but special problems in the collection of revenue and the handling of operating expenses are encountered. This necessitates a combination of the sales book with the customer's ledger, giving us a composite record known as the consumer's ledger. Because of the public interest in the operation of these companies, the law has furnished a more or less rigid classification of operating accounts in the general ledger, to show accurately the results of the operation of the business and the sources of the funds invested in permanent improvements.

8. *Final group.*—The final group consists of public service corporations. The steam railroad presents special problems because of the enormous volume of transactions that must be recorded and the consequent difficulty in securing economical and efficient accounting methods and a speedy summarization of results in the general books. Street railway accounting is included because it presents unusual problems and is a combination of a cash business with one dealing on credit. We find, therefore, that its accounting system resembles that of financial institutions in dealing with receipts and that of trading companies in regard to disbursements.

Public accounting presents problems of a unique nature and has, therefore, been treated independently. The accounting for decedents' estates also has little in common with other methods of accounting and has been given independent treatment.

CHAPTER II

BUSINESS OF A BUILDING AND LOAN ASSOCIATION

9. *Origin of the building and loan association.*—The two financial institutions which have been of greatest service to working men and others of moderate means are the savings bank and the building and loan association. The former, while of great value to the community, did not meet the demands of those in humble circumstances who desired assistance in the construction of their homes. The savings bank furnished the means by which they could save the amount necessary to build their houses, but it forced upon them a long delay while this money was accumulating. A keen desire was felt for some method by which the house could be built, and paid for later. No financial institution, however, would lend money to people whose chief asset was their health and wage-earning capacity; and it was not until some genius devised the building and loan association, and instituted the first organization of this kind in Frankford, a suburb of Philadelphia, in 1831, that this demand was met.

The building society became a prominent part of our financial organization in the decade between 1840 and 1850.

10. *Differences between a savings bank and a building association.*—The building association differs from the savings bank in that its investments are made in real estate loans instead of in securities. The loans are made to its members—who correspond to the depositors

of the bank—and are later paid back in installments out of the future savings of these people.

The two distinguishing characteristics of a building association are, first, that every borrower is also a stockholder; and, second, that the capital of the association is represented, not by the par value of the capital stock, but by the combined savings of its members, together with the interest and premiums paid to the association by borrowing members, less a small deduction for expenses. The ordinary association finds a sufficient demand for its money among its members (who are always given the preference in borrowing), with the result that it is rare to have a society seeking outside investments.

11. *Methods of issuing stock.*—The stock is issued according to one of several plans. The most commonly used method is that of issuing various series of stock starting at different dates. The face value of a share is usually $200, but the actual value never reaches this amount until the share is paid up and called in by the association for cancellation.

The subscriber to the stock of a building association pays for it in installments. These usually take the form of dues which are generally $1 per share per month. The total contribution of the shareholder from dues is augmented by his proportionate share of the profits of the association, which is credited to him according to one of several methods. When the total of dues and profits equals the face value of the stock it is said to mature. If the member has borrowed from the association, the maturing of his stock marks the end of his indebtedness; the stock is called in and canceled, being taken by the association to satisfy the mortgage debt upon the member's property.

It will be seen from the foregoing that the value of

a share of unmatured building association stock is not the par value printed on its face, but a constantly varying amount. In reality, the stock has two values—first, the holding or "book value," which is the accumulated dues which have been paid in plus the member's proportionate share of the association's profits; and, second, a "withdrawal value" which the association agrees to pay to a member who withdraws from the association before his stock matures. The withdrawal value is almost always less than the book value.

12. *Types of associations.*—Building associations are organized in numerous ways, but there are four principal types in existence. These are associations organized upon, first, "the terminating plan"; second, "the serial plan"; third, "the permanent plan"; and, fourth, "the Dayton" or "the Ohio plan."

13. *The terminating plan.*—The terminating plan was the first to be worked out and is the simplest form of organization. Under this arrangement all the stock is issued at the time of organization of the association and consequently all matures at the same time. With the maturity of the stock the association goes out of existence. Under this plan the association has but one series of stock and any member who comes in at a later date is required to pay, at the time of his admission, not only the back dues, but also an amount corresponding to his proportionate part of the accumulated profits of the association; in other words, he puts in the book value of his stock as though he had been carrying it from the time of its original issue.

14. *The serial plan.*—The serial plan is an extension of the terminating plan. Instead of one issue of stock, there are several issues put out at different dates, usually at some stated period—say once every year. The asso-

ciation does not terminate with the maturity of the first series, but continues in existence usually for an indefinite period, for new series are constantly being issued which must run their natural course to maturity. The stock is classified according to the date of its issue. All shares of the same series have an equal value at any given date. When the total dues and profits of a share equal $200, the series is paid off and canceled.

A building association conducted on the serial plan is very much like a number of associations organized on the terminating plan, but all operated under one management. The principal problems in building association accounting arise from the co-existence of these series of stock, each with a different date of beginning, and possibly also each having a different number of shares. Each of these series has a different value depending upon its age, the older ones having claim to a larger share of the association's profits.

15. *The permanent plan.*—The permanent plan is a further development of the serial plan. Under this plan there are no stated periods for the issue of stock, and a member may take out shares at any time. Each member's stock practically constitutes a separate series, and is paid off when it reaches the book value of $200 a share. Under the permanent plan the problem of distributing profits is even more complicated than under the serial plan.

16. *The Ohio or Dayton plan.*—The most complex organization is that provided by the Dayton or Ohio plan. The distinguishing characteristic of this plan is the fact that members are not required to pay a stated amount of dues on a given date, as in the preceding plans, but may make payments in such amounts and at such intervals as are most convenient.

Under this plan the amounts contributed are first applied to the interest on the member's loan, while the remainder, if any, is entered in his membership book and credited on his stock. There is practically no difference between such an association and a savings bank except that the funds of the organization are lent to the depositors instead of being invested in outside corporate securities.

17. *Method of deciding on the desirability of loans.*—An interesting part of the business of the building association is the method by which applications for loans are decided upon. The security for the loans made to members is twofold: First, a mortgage lien upon the property to be improved; and, second, the borrower's stock in the association. Recently, building associations have begun to accept collateral deposits of stocks and bonds of other corporations instead of mortgages upon real estate as a basis of money loans. Where this is done the organization is not very different from a savings bank. Temporary loans are made by most associations on the security of the member's stock, the amount lent in such cases being usually less than the withdrawal value.

The success of a building association depends very largely upon the business acumen and attentiveness of its board of directors, which is the governing body and which decides upon all applications for loans.

When an application for a loan is received, the board, either through a committee or in its entirety, reviews the security offered. If the member proposes to construct a house upon a lot which he owns, they take into consideration the value of the lot and the value of the property when completed according to the plans which he proposes. They then decide whether the association

would be safe in lending the amount applied for. The loan is usually made in such cases so as to insure that the money will be invested in the building. The association takes a mortgage covering the house and lot.

Where the application is for a loan upon a completed building, the board considers the selling price of the building and determines the amount which can with safety be lent upon it. In such cases it is usual to require that some portion of the purchase money be advanced by the member.

18. *Security for loans.*—Experience has shown that building associations can lend with safety a larger percentage upon the value of properties than trust companies or other financial institutions. There are two reasons for this. The first is that the amount of the risk is constantly diminishing from the day the loan is made. The association holds the stock of the member as additional security for the loan, and, as the value of the stock is constantly increasing, the amount which must be realized from the property in order to secure a return of the loan grows smaller each month.

The second reason is that the building association member will make a harder fight to meet his financial obligations than the ordinary mortgage borrower. His interest payments come once each month instead of perhaps once or twice a year. The saving of the interest is, therefore, a continuous matter. In addition, the member sees his indebtedness being constantly reduced through the increase in the value of his shares of stock whose maturity will eventually cancel the mortgage; he feels that he is making progress and will exert his utmost endeavors to meet his association dues.

19. *Methods of making loans.*—The report of the Commissioner of Labor already referred to describes

seventy different plans of making loans to applicants. There are, however, only a few of these in general use. The simplest plan is to make loans to applicants in the order in which they apply at a fixed rate of interest, say ½ of 1 per cent per month, without premiums. This scheme usually leads to friction and does not always enable the association to make the largest possible profits.

A second plan was devised by which the loanable funds are auctioned to the highest bidder in one of two ways. The first is to fix a certain rate of interest, as in the former case, and to have the bidding take the form of an offer to pay a certain amount of interest in advance. Take, for example, an association with 2,000 shares of stock. The monthly dues would be $2,000. "A" wishes to borrow this $2,000 which is to be offered. He subscribes for ten shares of stock whose par value is $2,000, and then appears at the meeting of the directors to make his bid. Suppose that the interest has been fixed at 12½ cents per week for each $100. "B" also appears and offers to pay twenty-five weeks' interest in advance. No other bidders appear, and the money is awarded to "B," who receives in exchange for his mortgage and assignment of stock, $2,000, less 25 weeks' interest in advance, or $1,937.50. "B" now has no interest to pay upon his loan until the expiration of 25 weeks. During this time, of course, his dues have been continuing in the regular manner. At the end of this period he has to keep up his interest as well as continue to pay his dues.

Another form of auctioning money is to have the bids made upon the basis of premiums in addition to the regular dues on the stock. Suppose that in an association where this system prevails "C" wishes to bor-

row $2,000. He subscribes for ten shares of stock, but instead of offering interest in advance, bids a premium of $1 per month on his ten shares of stock to secure the money. Let us suppose his offer is accepted. "C's" total monthly payments in this case would be $10 interest on the loan, $10 dues and $1 premium on his stock, or $21 a month. This would be paid each month until his stock matured.

In some cases the association provides that the dues of borrowing members shall be applied to the reduction of the principal of the loan. If this is done the interest payments will constantly decrease. In such a case the borrower's stock does not participate in the association's profits and the loan is really repaid serially.

20. *By-laws regarding loans.*—The by-laws of the Reliance Building and Loan Association contain the following article in relation to loans:

ARTICLE IV.

LOANS.

Section 1. Each stockholder for every share of stock owned or held by him, shall be entitled to a loan of $200 from the Association upon giving security satisfactory to the Board of Directors. Whenever the funds in the treasury shall warrant it, the money shall be offered at public auction, at the regular monthly meeting of the Board of Directors, and be disposed of to the highest bidder. All bids shall be for one share, with the privilege of taking ten shares; Provided, that no loan shall be made under par and no person shall be allowed to borrow on more than twenty shares of stock at one bidding. The borrower shall, thereupon, be charged with and pay interest on each share, at the rate of one-half of one per cent a month. The borrower shall also pay for each and every month, one-hundredth part of the whole amount of the premium bid. If any dispute shall arise in the bidding or selling of the money,

the decision of a majority of the Board of Directors present shall be final. Upon application being made for a loan on real estate security, the president shall appoint a committee of three directors as a property committee upon such loan. They shall personally examine and inspect the security offered, the size and character of the same, the amount of insurance thereon, the ground rent, or incumbrance, the market value of the security, and other information that can be had, and report the same to the Board of Directors. They shall receive for their services one dollar each for each property examined, said fee to be paid by the applicant for the loan.

Section 2. Whenever a stockholder shall have bidden successfully for a loan, he shall permit all arrearages and fines due on the borrowed stock to be deducted from the amount to be received by him. Before he shall be entitled to receive the same, he shall secure the payment thereon to the Association by a bond and mortgage (accompanied by a policy of fire insurance) secured on real estate in any part of the State of Pennsylvania. Also bonds issued by the United States of America, the Commonwealth of Pennsylvania, or by the City of Philadelphia, or the stock of this Association may be taken as security for loans. When loans are made on the stock of this Association, the loan shall not exceed the amount which the borrower has paid in; Provided, the Board of Directors approve of the sufficiency and nature of such security. And the borrower shall, for every loan of $200, transfer one share of stock to the Association, as a further security for the loan, and in payment of the same. In case of failure to give satisfactory security within two months, the interests shall be charged to such purchaser, together with all costs and expenses attending the examination of title and searches, and the money shall revert to the Association.

Section 3. Whenever there are no bids for loans the Board of Directors may invest the money temporarily in United States, state or city loans, first mortgages and ground rents on real estate.

Section 4. If any stockholder shall neglect to pay the interest on his loan for more than six months the Board of

Directors may compel payment of principal and interest, by proceeding on his bond and mortgage according to law.

Section 5. A borrower may repay a loan in amounts of not less than one share at any time, and, in case of the repayment thereof before the maturity of the shares pledged, for said loan, there shall be refunded to such borrower the withdrawal value of the shares pledged for said loan and the shares shall thereupon revert to the Association. Further, the Association will accept amounts of not less than $25 at a time; Provided, that the interest on the loan shall not be decreased until the sum of $200 be repaid.

21. *Application for loan.*—Prior to making a bid for a loan a member of the association must make application for the loan. Form 1 (pages 17–20) shows the blank provided for this purpose.

22. *Assignments of other collateral.*—Sometimes, as we have seen, loans are made upon the security of the stock of the association, without additional collateral. In such cases the member will fill out the following note which is deposited with the association together with his stock as security.

Form 2.—Note to Building and Loan Association.

PHILADELPHIA, Pa., —— ——, 19—.

On demand, after date, I promise to pay to the order of Reliance Building and Loan Association, —— Dollars, with interest at six per cent. per annum, payable monthly, without defalcation, for value received, having deposited herewith —— shares of the —— series of stock of the said Reliance Building and Loan Association, —— which I authorize the holder of this note, upon the non-performance of this promise at maturity, to sell either at the Brokers' Board or at public or private sale, without demanding payment of this note or the debt due thereon, and without further notice, and apply proceeds, or as much thereof as may be necessary, to the payment of this note and

APPLICATION.

RELIANCE BUILDING AND LOAN ASSOCIATION

....190

Application is hereby made to Reliance Building and Loan Association

For a loan of $.................... to be secured by assignment of ....shares of Stock of said Association, and by mortgage upon—

The following described premises:—

Location and description of ground	....
Description of Buildings, when erected and how occupied	....
Repairs, improvements or street improvements made within six months	....
Insurance, perpetual or annual, in what company, and the amount	....
Value of ground	....
Value of improvements	....
Assessted value	....
Rental	....
Owner in fee	....
Address	....
Tenant	....
Present incumbrance	....

HELD BY

WHEN DUE ....*Applicant.*

RATE OF INTEREST

Residence..

☞ An examination fee of $3.00 must accompany each application to pay expenses of the Property Committee.

FORM 1—Application for Loan

X—2

No.____________

APPLICATION

TO

RELIANCE

BUILDING AND LOAN ASSOCIA-

TION

By________________________

For Loan of $______________

For Lease__________________

Property____________________

____

____

____

FORM 1—Continued

I have examined the Title to the property embraced in the within Application and particularly described in the........................... thereof executed by............................... to your Association, dated the......................... day of .... Anno Domini 190 and now lodged for record, and am of the opinion:

1. That a good and sufficient Title in fee simple to the said premises was vested in the said............................... when .... executed the .... aforesaid.

2. That the said .... therein recited have been properly prepared and executed.

3. And that by the Searches produced it sufficiently appears that there is no incumbrance of record against the said premises prior to the .... above designated excepting

....

Solicitor.

Dated.. 190

Form 1—Continued

(To be signed when application is for Loan secured by Mortgage.)

I agree that the Association may use the mortgage and any and all other collaterals given to secure the repayment of such loan as shall be granted upon the within application, by hypothecation or otherwise, as may seem for the best interests of the Association and its members.

And I agree to furnish at least once a year, and at such other times as requested by the Association, tax receipts and receipts for interest or other periodical payments on account of all prior incumbrances upon the property the subject of this application; failure to do which for thirty days after demand shall cause the debt to become immediately due and payable at law.

....

Applicant.

We have examined the within-described property and recommend that the application be..............................granted.

....

....

....

....

....

Property Committee.

Dated..............................190

The report of the Property Committee on the within application was........ approved by the Board of Directors at a meeting held on the.............................. day of..................................190 , and the application...........................granted.

....

Secretary.

FORM 1—Continued

all necessary expenses and charges, holding me responsible for any deficiency.

And further, I do hereby authorize and empower any attorney of any court of record of Pennsylvania, or elsewhere, to appear for and to enter judgment against me for the above sum, with or without declaration, with costs of suit, release of errors, without stay of execution, and with five per cent added for collecting fees; and I also waive the right of inquisition on any real estate that may be levied upon to collect this note, and do hereby voluntarily condemn the same, and authorize the prothonotary to enter upon the F I, F A. my said voluntary condemnation, and I further agree that said real estate may be sold on a F I, F A., and I hereby waive and release all relief from any and all appraisement, stay or exemption laws of any state, now in force, or hereafter to be passed.

Witness:

—— —— L. S.

—— —— L. S.

At the same time he must fill out an assignment for the stock which he holds to the association as additional security for the sum borrowed.

23. *Distribution of profits under "terminating" plan.*—Perhaps the most difficult thing to understand about the building association is the plan for the distribution of profits. In an association organized under the terminating plan, profit distribution is a comparatively simple matter because there is but one series of stock. The method of dividing the profits can best be understood by taking an illustration. Suppose we have a company with 1,000 members each of whom has subscribed for one share of stock of the face value of $200, and that in this organization the dues are $1 per month per share in advance. We will assume that loans are made at the rate of ½ of 1 per cent per month and that the association has no expenses.

The total dues received each month from the members would be $1,000. When the association organizes and holds its first meeting the first month's dues are collected. The company then has in its treasury $1,000. The directors, therefore, announce that they are willing to accept bids for a loan of $1,000 at the prevailing rate. This loan is taken. At the end of the first month the association has its second regular monthly meeting. The second series of dues is then paid, giving the association $1,000 for this series. In addition, the association receives the interest on the first loan of $1,000 at ½ of 1 per cent a month or $5.00. This would be loaned again at 6 per cent. At the end of three months the association will have in addition to their regular dues $5 plus the interest on $1,005, at ½ of 1 per cent or $5.02 as interest upon loans, or $10.02, in addition to the payments made by members.

Throughout we have assumed that the association had no expenses, or that such as were incurred were paid by the borrowers. The following table shows the amount of dues, interest and profits for the first year of the association's existence:

1st month ..	$1,000.00	$5.00.0	$1,005.00.0	$1.00	$.005
2d "	1,000.00	5.02.5	1,010.02.5	2.01	.01
3d "	1,000.00	5.05.0	1,015.07.5	3.03	.03
4th "	1,000.00	5.07.5	1,020.15.0	4.05	.05
5th "	1,000.00	5.10.0	1,025.25.0	5.07	.07
6th "	1,000.00	5.12.6	1,030.27.6	6.10	.10
7th "	1,000.00	5.15.2	1,035.52.8	7.14	.14
8th "	1,000.00	5.17.7	1,040.70.5	8.18	.18
9th "	1,000.00	5.20.3	1,045.91.8	9.22	.22
10th "	1,000.00	5.22.9	1,051.13.7	10.28	.28
11th "	1,000.00	5.25.5	1,056.39.2	11.33	.33
12th "	1,000.00	5.28.1	1,061.67.3	12.39	.39
Total	$12,000.00	$61.67.3	$12,397.22.9		

Where but one series is issued the problem is simply one of computing and compounding interest on loans made, and dividing the total interest received during

any given period by the number of shares outstanding, thus securing the rate of profit per share. The book valuation of the shares is found by adding these profits to the amount of the dues paid in. The withdrawal valuation as already stated is fixed by the rules of the company. As a matter of fact such laborious computations are not usually made by the secretary. He has interest tables and other similar schedules which give him the information by which the various amounts can be quickly ascertained.

24. *Profit distribution under other types of associations.*—Where several series of stock have been issued by the association the distribution of profits becomes a complicated matter. There are a great many schemes of distribution in use in such cases. The two most generally followed are known as the "partnership plan" and Dexter's Rule. These plans, like the one already considered, are merely mathematical devices intended to secure the most equitable distribution of profits among the various members in proportion to the amounts which they have contributed to the association. Let us assume that an association is formed with dues of $1 per share and at the end of the third year three series of stock ning of each year, and that a fourth issue is just starting. In order to make our illustration as simple as possible, let us take as being accurate, the book value per share as appearing upon the company's books at that date. The record, in brief, is as follows:

Series 1	500 shares, book value per share	$38.85.
Series 2	600 shares, book value per share	25.28.
Series 3	400 shares, book value per share	12.33.
Series 4	500 shares, book value per share	0,—.

Suppose that the total profits for the first three years were $2,325 and that the profits of the fourth year are $3,000. Our problem is to ascertain the method by which this total sum of $5,325 should be distributed among the four sets of claimants.

25. *Distribution by the partnership plan.*—The simplest and most obvious method is to divide the profits by the same method as is usually employed in an ordinary business partnership where the partners have entered the business at different times. The association regards each series of stockholders as a partner. The plan is to divide the profits—not upon the basis of the number of shares or the book value of the shares—but rather upon the basis of the time during which each dollar paid in by the stockholders has been in the possession of the company. Let us see how this works out. Take the fourth series, for example. At the end of the four years each share of stock will have been in force 12 months. The first dollar of dues paid by the members will have been invested for 12 months; the second 11 months; the third 10 months, and so on. The last dollar of dues has been invested for one month. It is obvious that the earnings of each of these dollars of dues is very dissimilar. The first has worked 12 times as long as the last and twice as long as the 6th. To figure out the earnings of every dollar received by the association would be a never-ending task, so it is necessary to arrive at some method by which the work performed by this money can be determined. Each share of the fourth series has had $12 invested in it. To ascertain the average time during which these $12 were in the hands of the association we would add together 12 + 11 + 10 + 9 + 8 + 7 + 6 + 5 + 4 + 3 × 2 + 1 getting the total of 78 months, and divide this by 12, the number

of months covered by the computation. We find, therefore, that the \$12 which has been paid in, has been invested for an average of $6\frac{1}{2}$ months (78 divided by $12 = 6\frac{1}{2}$). This, of course, could be done in a much shorter and more direct method by adding the first and last term of the series and dividing the result by 2. Thus $12 + 1 \div 2 = 6\frac{1}{2}$ months, the average time for this series. This gives us our general rule. Take the total number of months during which the series has run, add one and divide the total by two. If this is done for every series the association will be able to ascertain the average period during which it has held the money paid in by each series of stockholders.

If the computation is carried further and the "equated time," as it is called, is multiplied by the number of dollars paid in on each share of the series and this sum again multiplied by the number of shares in the series the association arrives at the so-called "equated dues," which is simply a fictitious mathematical computation whose purpose will be seen later on. Thus for each share of stock of the fourth series which we have been considering the equated dues will be $6\frac{1}{2} \times 12 \times 500 = 39{,}000$. Let us apply this method to each of the series of stock, first ascertaining the equated time and finally the equated dues.

Series 1. $\dfrac{48 + 1}{2} = 24\frac{1}{2}$ months, equated time.

Series 2. $\dfrac{36 + 1}{2} = 18\frac{1}{2}$ months, equated time.

Series 3. $\dfrac{24 + 1}{2} = 12\frac{1}{2}$ months, equated time.

Series 4. $\dfrac{12 + 1}{2} = 6\frac{1}{2}$ months, equated time.

Series	I.	$24\frac{1}{2}$ months × \$48 × 500 shares =	\$588,000 equated dues.
Series	II.	$18\frac{1}{2}$ months × \$36 × 600 shares =	399,600 equated dues.
Series	III.	$12\frac{1}{2}$ months × \$24 × 400 shares =	120,000 equated dues.
Series	IV.	$6\frac{1}{2}$ months × \$12 × 500 shares =	39,000 equated dues.
			\$1,146,600 equated dues.

We now divide the total profits, \$5,325, among the four series in proportion to these equated dues. Thus:

Series 1.	$\frac{588,000}{1,146,600}$ or $\frac{980}{1911}$ of 5,325 =	\$2,730.77	or	\$5.46 per share.
Series 2.	$\frac{399,600}{1,146,600}$ or $\frac{666}{1911}$ of 5,325 =	1,855.81	or	3.09 per share.
Series 3.	$\frac{120,000}{1,146,600}$ or $\frac{200}{1911}$ of 5,325 =	557.30	or	1.39 per share.
Series 4.	$\frac{39,000}{1,146,600}$ or $\frac{65}{1911}$ of 5,325 =	181.12	or	0.36 per share.

Adding profits to dues paid in we obtain the book value of a share of each series, thus:

Series 1.	\$48	+	\$5.46	=	\$53.46, book-value.
Series 2.	36	+	3.09	=	39.09, book-value.
Series 3.	24	+	1.39	=	25.39, book-value.
Series 4.	12	+	0.36	=	12.36, book-value.

26. *Advantages and disadvantages of partnership plan.*—The partnership plan is open to a number of serious objections. The first is that the method of distributing profits is wholly fictitious and does not correspond with actual conditions. As a matter of fact the profits of the association have already been distributed each year by being credited to the book value of the various shares outstanding. The computation presumes, however, that they have been put back into a common pool, re-distributed each successive year and then returned again to the association, this being continued until the end of the existence of the organization.

The second objection is that the plan ignores the rights of the older issues and may result in a new series

of stock securing advantages at their expense. Suppose in the fourth year the association, through unfortunate investments, had not made any profits. Under the partnership plan the fourth series of stock, however, would have a share in the $2,825 of profits earned before it came into existence.

On the other hand, this plan might work to the disadvantage of the fourth series. If the profits of any one year were unusually large, owing to an active demand for money or some other reason, the earlier series would, by reason of their much greater average period of investment, have a distinct advantage over the later series in the distribution of the profits.

27. *Dexter's rule.*—Dexter's rule avoids many of these disadvantages by not only placing each year on a percentage basis but by recognizing past profits in the distribution of current earnings. The method of computation under this rule is generally similar to that which we have already studied—the system of equated values.

Take the same illustration used in the partnership plan. Working it out under Dexter's rule, we would first ascertain the equated value of the total book value of the actual payments made to the credit of various issues and add to that the equated value of each issue. Our results would be as follows:

			Equated value.
Series 1.	$38.85 book value of each share × 500 × 12 months =	$233,100.00	
	12 × 500 × 6½ =	39,000.00	$272,100.00
Series 2.	$25.28 × 600 × 12 =	182,016.00	
	12 × 600 × 6½ =	46,800.00	228,816.00
Series 3.	$12.33 × 400 × 12 =	59,184.00	
	12 × 400 × 6½ =	31,200.00	90,384.00
Series 4.	12 × 500 × 6½ =		39,000.00
Total			630,300.00

The principle involved in this calculation is the same as that in the partnership plan. Let us take Series 1 as an illustration. Each share had a value of $38.85 at the beginning of the year, that is to say, the company possesses assets equal in value to $38.85 for each one of the 500 shares in Series 1. To ascertain the total amount of Series 1 we would multiply $38.85 by 500 or the number of shares, getting as a total the amount which the company had invested throughout the entire year for these shareholders. In other words, they had $19,425 invested for twelve months, which is equivalent to $233,100 invested for one month. This finishes our first calculation.

The stockholders of Series 1 are also entitled to profits which the association derives from investment of their dues paid the first of each month throughout the year. Each shareholder contributed $12 in dues. As there were 500 shareholders the total contribution from dues was $6,000. This was employed for a period ranging from 12 to 1 months. The equated time would, therefore, be 6½ months; and it would be equivalent to $39,000 invested for one month. The treatment for the succeeding series is exactly the same.

There are several other methods, more technical in character, of arriving at this result. However, this is sufficient for our purposes. It is easily seen that the profits of $3,000 of the fourth year (see page 24), which belong to each series, is the relation which their equated value bears to the total equated value of all of the series in the association. The results, therefore, would be as follows:

$\frac{272,100}{630,300}$ of $3,000 = $1,295.10 to Series 1, or $2.59 per sh.

$\frac{228,816}{630,300}$ of 3,000 = 1,089.08 to Series 2, or 1.81 per sh.

$\frac{90,384}{630,300}$ of 3,000 = 430.20 to Series 3, or 1.08 per sh.

$\frac{39,000}{630,300}$ of 3,000 = 185.62 to Series 4, or 0.37 per sh.

$3,000.00

Adding the earnings belonging to each share of each series, and the dues paid in during the year to the book values at the end of the preceding year, we find that the present book value of each share in each series is as follows:

Series 1.	$38.85 +	$12 +	$2.59 =	$53.44
Series 4.		12 +	0.37 =	12.37
Series 3.	12.33 +	12 +	1.08 =	25.41
Series 2.	25.28 +	12 +	1.81 =	39.09

If we compare these results with those of the preceding computation made according to partnership plan we see the advantage which the older series obtain at the expense of the newer issues. In the case which we considered this represents merely the proper crediting to the early series of the earnings arising from the use of the profits of preceding years.

There are many other methods of distributing profits. These, however, are the only ones most generally used. If the student is interested in studying the other methods they may be found in the report of the United States Commissioner of Labor for 1893.

The final step in the history of a series of building association stock is reached when the book value of the shares reaches $200, which is also its par value. At that time the stock is said to mature. The association then pays off the non-borrowing shareholders in cash to the

value of their matured stock while the borrowers have their mortgages or their loans cancelled and returned to them in exchange for their stock certificates.

28. *Withdrawal plans.*—Frequently a shareholder wishes to withdraw from the association before his stock matures. Such members are very rarely paid the full book value of their shares. There are numerous methods of determining the amount to be paid to the association. The most commonly used method is to return to the withdrawing shareholder the dues which he has paid in, together with a fixed rate of interest, say 4 per cent per annum, on such payments. The rate of interest which is usually fixed is considerably below the average rate of earnings of the association.

Another largely used method is to allow the withdrawing shareholders not only the full dues which they have paid in, but all the profits up to the date of their withdrawal. In such cases the member is really given the full book value of his stock at the time of his withdrawal.

CHAPTER III

ACCOUNTING SYSTEM OF A BUILDING AND LOAN ASSOCIATION

29. *Nature of the accounts.*—In studying the methods of accounting employed by building and loan associations, we must bear in mind that in this as in any other business the character of the business determines the type of system used. The operations of such a society are of the simplest kind. All the dealings have to do with cash. A building society receives cash for dues on stock, interest on loans made to members, fines, entrance fees, premiums, and in liquidation of loans. It makes payments of cash to the proper persons for running expenses, and to members who have secured loans or who on the maturity of their stock receive its par value.

The various states are very strict in prescribing by law the method of administration of building societies, and usually provide for the regular examination of their books and accounts by state examiners. As the money of a building society is in the hands of one or two men, it follows that the chances for defalcation are great. A rigid supervision is, therefore, not only desirable, but necessary, in order to protect the members against fraud.

30. *Principal books used.*—The principal books used by building societies are the cash book, loan register and roll book. The form and operation of the accounting system varies somewhat depending on the plan in force. These differences are, however, unimportant.

When anyone desires to subscribe for shares of a building and loan association, he fills out a subscription blank (Form 3) and presents it to any meeting at which stock is to be issued. The entrance fee, as stated in the subscription blank, is required from all members entering the society.

Form 3.—Subscription Blank.

PHILADELPHIA, PA., —— ——, 19—.

I hereby subscribe for —— shares of stock in

THE RELIANCE BUILDING AND LOAN ASSOCIATION

One dollar per share monthly.
Entrance fee, 25c per share. **Signature ——**
Address ——

Meets first Tuesday of each month at ——. New series open at February, June and October meetings. New members admitted at any meeting without additional expense.

31. *Pass book.*—Having become a member, a book is issued containing an entry of payments made for entrance fees and for dues. This book specifies the name and number of the member as shown by the roll, the number of shares of stock subscribed for, and the number of the series in which the shares have been taken. In the back of the book there is usually inserted a copy of the constitution and by-laws of the society so that each member may be familiar with its rules and regulations.

32. *Roll book.*—The secretary of the society always takes with him to the meetings what is known as the "members' roll book." (Form 4.) It will be noticed that the amounts due by the members at each meeting are entered in the debit column under the month in which the meeting is held. When a member makes

Series 14					BALANCE			
					Dr.		Cr.	
Book No.	Shares	Members' Names			$	Cts.	$	Cts.
307	10	John Doe 200 No. 52d *Mortgage loan on 1130 Divinity St. of $2,000*	*1.50* *10.00* *10.00*	Insurance E. Fee Fines Premium Interest Dues				
308				Insurance E. Fee Fines Premium Interest Dues				
309				Insurance E. Fee Fines Premium Interest Dues				
310				Insurance E. Fee Fines Premium Interest Dues				
311				Insurance E. Fee Fines Premium Interest Dues				
312				Insurance E. Fee Fines Premium Interest Dues				
313				Insurance E. Fee Fines Premium Interest Dues				

X—3 FORM 4—Members' Roll Book

June				July				August				September				October			
Dr.		Cr.		Dr.		Cr.		Dr.		Cr.		Dr.		Cr.		Dr.		Cr.	
$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.
2	*50*	2	50																
				1	*50*	1	50	*1*	*50*										
				10	*00*	10	00	*10*	*00*										
10	*00*	10	00	*10*	*00*	10	00	*10*	*00*										

Form 4—Continued

November				December				January				February				March			
Dr.		Cr.		Dr.		Cr.		Dr.		Cr.		Dr.		Cr.		Dr.		Cr.	
$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.

Form 4—Continued

April				May				Year's Total				Year's Balance				
Dr.		Cr.		Dr.		Cr.		Dr.		Cr.		Dr.		Cr.		
$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	$	Cts.	

Form 4—Continued

payment, the amount is entered in the credit column, and also in a book generally known as a daily cash book or scratcher. In this book is recorded merely a rough memorandum of the money received by the treasurer at the meeting. (See Form 4 on pages 33–36.)

33. *Debit side of the cash book.*—Later on the secretary or treasurer summarizes the receipts in the daily cash book, and then enters them in the general cash book of the society, crediting them as receipts from "June meeting," "July meeting," etc., the amounts for dues, interest, fines, etc., each being entered in the proper column. Form 5 (pages 38–39) represents the debit side of the general cash book.

34. *Credit side of the cash book.*—The credit side of the cash book contains columns to record the moneys paid on mortgage loans and stock loans and additional columns for the classification of all other expenses of the society. Form 6 (pages 40–41) shows the credit side of the cash book.

Before any money can be paid out by the treasurer he must have received an order drawn on him by the board of directors, signed by the president and attested by the secretary. This is for the purpose of preventing him from paying out money without proper authorization, and also to protect him by giving him a permanent record of the authorization for the disbursement.

35. *Loan register.*—As loans are made to members they are entered by the secretary in the loan register with a full description of the securities received. This gives the association a permanent record of the property which has been pledged as security for the loan and enables the officers and auditors to assure themselves that the security is adequate. Such a loan register is shown in Form 7 (pages 42–43).

DEBIT SIDE

Date		Name or Description	Dues	Interest	Premium	Fines
1906						
June	1	Balance.................				
	5	June meeting............	$686.00	$ 69.35		$ .72
	6	H. N. Diesel loan @ 5½%...				
	13	H. N. Diesel loan @ 5½%...				
July	3	July meeting............	538.50	64.00		.60
Aug.	7	August meeting..........	692.00	50.20		10.21
Sept.	4	Int. to date continental T. & T. %............		3.30		
	4	September meeting........	719.50	107.75		5.73
	4	Mary G. Webb. int. for $600 1 mo., loan not taken....		3.00		
	4	Mrs. Laura I. Lewis........				
	4	H. N. Diesel, loan @ 5½%..				
	7	Edw. C. Snyder...........		.32		
Oct.	2	October meeting..........	850.00	94.93		4.70
			$3,486.00	$392.85		$21.96

FORM 5—Cash Book

CASH BOOK

Entrance Fees	Insurance	Mortgage or Stock Loans Repaid	Borrowed Money	Rent	Sundries	Total
						$ 56.71
$30.50	$ 1.15					787.72
			$ 400.00			400.00
			900.00			900.00
6.25	1.15					610.50
	1.15					753.56
						3.30
2.50	1.15					836.63
						3.00
		70.00				70.00
			1,400.00			1,400.00
		32.00				32.32
30.50	1.15					981.28
$69.75	$5.75	$102.00	$2,700.00			$6,835.02

FORM 5—Continued

Order No.	Date		Name	Mortgage Loans Made	Stock Loans Made	Dues on Withdrawals
	1906					
81	June	5	Sarah A. Norris............	900.00		
82	"	5	Wm. Alexander............			120.00
83	"	5	Edw. C. Snyder............		32.00	
84	"	5	Lewis Geo. Russell.........		125.00	
85	"	13	Annie Wilson..............	900.00		
87	Aug.	7	W. C. Pitts................		100.00	
88	"	7	Fred J. Lewis..............		25.00	
89	"	7	Leeds & Biddle, printing....			
90	"	7	John C. Knox, sal. to May 31, 1906..................			
91	"	7	Premium on Treas. bond....			
92	"	7	Bus. Men's Assn., rent to October 1, 1906............			
93	"	7	Edw. C. Snyder............			45.00
95	"	7	H. N. Diesel pd. on %c loan of June 6, and June 13, 1906.			
96	Sept.	4	Evening Bulletin adv.......			
97	"	4	Thos. S. Mitchell...........			975.00
98	"	4	Eliz. D. Fry...............	1,200.00		
99	Oct.	2	James G. Carns............			33.00
100	"	2	Bus. Men's Assn., rent to December 31, 1906..........			

Form 6—Cash Book

CASH BOOK

Profits on Withdrawals & Int. on Loans	Borrowed Money Repaid Banks	Insurance	Salary	Prop. ex. Taxes W. R. Legal Exp.	Printing Advertising Postage	Sundries	Total
							900.00
4.35							124.35
							32.00
							125.00
							900.00
							100.00
							25.00
					19.83		19.83
			81.45				81.45
						4.00	4.00
						7.50	7.50
							45.00
	1,100.00						1,100.00
					5.40		5.40
60.00							1,035.00
							1,200.00
							33.00
						7.50	7.50

Form 6—Continued

Size of Lot	Fire Insurance					Title
	Company	Amount	Expires	Mtge. Clause	Policy No.	Company
20x101′ 2″	Fire Assn. of Phila.	2,000 00	Feb. 8, 1919	Yes	182104	Commonwealth

Form 7—Loan Register

REGISTER.

Stock Assign-ed	Recorded				Location of Property	Ward	Bldg.	Assessed Value		Mtge. Cards made out
	Date	Book	No.	Page				Date	Amount	
Yes	Feb. 9, 1909	W SV	1298	197	1130 Divinity St.	46	2 story brick side yard	1909	9,000 00	Yes

FORM 7—Continued

The secretary also frequently makes up for ready reference an index card record of the members and of properties on which mortgages are held.

36. *Annual report.*—In order to prepare a statement of assets the secretary should take into account the amount of loans, both mortgage and stock, the inventory value of such fixtures or books as may be owned by the association, the amount of dues, interest and fines in arrears, and the cash balance in the treasury. The liabilities would include dues paid in advance on the part of members, sums which had been borrowed from the bank to supply the demands of members for loans, interest which may have accrued on borrowed money, amounts due to members for stock withdrawn but not yet paid for, and finally, the value of the stock according to the plan adopted.

For purpose of study the report of the Reliance Building and Loan Association for the year ending December 31, 1907, is herewith appended.

ANNUAL REPORT.

Receipts.		Disbursements.	
Balance at last report	$ 68.12	Loans	$ 5,975.00
Dues, interest and fines	7,227.10	Withdrawals	5,402.69
Fees	65.00	Money borrowed repaid	4,650.00
Money borrowed	6,750.00	Interest	221.84
Loans repaid	2,355.00	Expenses	171.35
Interest on bank deposit	4.44	Taxes, etc., special	200.43
Taxes, etc., special	163.80	Balance	12.15
Total	$16,633.46	Total	$16,633.46

Assets.		Liabilities.	
Real estate loans	$14,450.00	Due stockholders	$10,110.00
Stock loans	900.00	Money borrowed	4,225.00
Due delinquent	236.19	Interest	103.62
Balance in bank	12.15	Advance payment	5.00
		Profits	1,154.72
Total	$15,598.34	Totals	$15,598.34

STOCK VALUATION

Series	No. of Shares	Shares Loaned	Paid on Each Share	Value per Share	With Value per Share.
First	20	5	\$60.00	\$72.25	\$66.00
Fifth	2		42.00	48.00	44.20
Sixth	117	4	36.00	40.41	37.62
Seventh	43	28⅛	30.00	33.06	31.12
Eighth	15½	15½	24.00	25.96	24.72
Ninth	43	7	18.00	19.10	18.27
Tenth	135	15⅛	12.00	12.49	12.12
Eleventh	93	2	6.00	6.12¼	6.00
	468½	76¾			

Mortgage Loans.

Book No.	2..	\$ 600.00
"	12..	400.00
"	104..	350.00
"	109..	1,000.00
"	118..	1,400.00
"	126..	2,900.00
"	113..	1,300.00
"	151..	200.00
"	148..	1,800.00
"	154..	500.00
"	156..	600.00
"	182..	1,500.00
"	185..	1,500.00
"	1114..	400.00
		\$14,450.00

Stock Loans.

Book No.	80..	\$350.00
"	94..	100.00
"	108..	100.00
"	119..	125.00
"	125..	100.00
"	149..	100.00
"	181..	25.00
		\$900.00

Book in Advance.

Book No. 91.. \$5.00

Books in Arrears.

Book No.	8..	\$ .60
"	76..	5.00
"	118..	14.28
"	119..	23.31
"	125..	5.50
"	126..	29.50
"	143..	18.00
"	151..	28.57
"	156..	6.00
"	166..	5.00
"	167..	46.83
"	1106..	10.10
"	1107..	31.00
"	1114..	12.50
		\$236.19

CHAPTER IV

ACCOUNTING SYSTEM OF A BUILDING & LOAN ASSOCIATION (*Continued*)

37. *Preparation of the annual report.*—It is difficult to understand the accounting of a building and loan association without seeing exactly how the various books are kept. We will, therefore, take the accounts of a building and loan association which are somewhat confused, endeavor to arrange them properly and finally arrive at a true understanding of the financial condition of the association.

Our subject of study will be the Alliance Building and Loan Association, which has a membership of one thousand.

The fiscal year runs from April 30 to May 1. The secretary of the association died in April, 1906. An accountant is called in and asked to prepare the annual report of the association, May 1, 1905, to April 30, 1906.

38. *Report of the previous year.*—The report of the previous year showed the following items:

ASSETS.

Securities	$365,000.00	
Investments in Real Estate	25,000.00	
Amounts due from members for interest, dues and premiums (in arrears)	7,000.00	
Office Fixtures and Stationery	250.00	
Balance in Treasury	2,500.00	$399,750.00

LIABILITIES.

175	shares	2d	series	132	mos.	paid	$ 23,100.00
325	"	3d	"	120	"	"	39,000.00
300	"	4th	"	108	"	"	32,400.00
375	"	5th	"	96	"	"	36,000.00

350 shares	6th series	84 mos. paid	$ 29,400.00	
325 "	7th "	72 " "	23,400.00	
425 "	8th "	60 " "	25,500.00	
500 "	9th "	48 " "	24,000.00	
700 "	10th "	36 " "	25,200.00	
850 "	11th "	24 " "	20,400.00	
1600 "	12th "	12 " "	19,200.00	
5925 "			$297,600.00	
Accumulated profit on above stock at 6 per cent			57,870.00	
Bills payable			20,000.00	
Dues paid in advance			1,000.00	
Reserve Fund			5,000.00	$381,470.00
Surplus				$ 18,280.00

The previous report also showed the value of each share of stock of the various series May 1, 1905, to be as follows:

2nd series	$189.80	8th series	$72.00
3rd "	166.90	9th "	55.90
4th "	145.60	10th "	40.40
5th "	125.50	11th "	26.30
6th "	106.90	12th "	12.55
7th "	88.80		

39. *Cash account for the previous year.*—The secretary has kept a rough cash book called "roll book"; also a "members' ledger," in which cash receipts are classified monthly in columns provided for dues, interest, fees and premiums. There is also a general ledger, in which appear accounts for each individual loan, as well as one controlling account of "loans." There are no accounts showing dues, premiums, fines, interest, expenses, the liability of the association to the stockholders of the various series or the accrued interest on these shares to date of last apportionment of interest. There is but one "cash account" showing total receipts and disbursements. An analysis of this cash account for the year ending April 30, 1906, shows the following receipts and disbursements:

RECEIPTS.

Balance in treasury May 1, 1905	$ 2,500.00
Dues received during the year	75,850.00

Interest received on loans	$ 23,000.00	
Premiums	1,000.00	
Fines	500.00	
Entrance fees	500.00	
Loans repaid	136,000.00	
Rents received on Real Estate	2,000.00	
Bills payable	90,000.00	$261,350.00

DISBURSEMENTS.

Matured stock, Second Series, 175 shares paid as of Sept. 30, 1905		$ 35,000.00	
Advances to members on account of loans, 725 shares		145,000.00	
Shares withdrawn:			
3rd series, 20 shares	$ 2,520.00		
4th " 50 "	5,600.00		
6th " 200 "	18,400.00		
10th " 30 "	1,140.00		
12th " 5 "	80.00		
13th " 15 "	75.00		
		27,815.00	
Profit paid on above shares withdrawn		3,868.80	
Interest, taxes and expenses on real estate		1,000.00	
Repairs to real estate		750.00	
Printing and Advertising		300.00	
Interest and discount on bills payable		603.20	
Secretary's salary		780.00	
Advanced payments repaid		108.00	
Bills payable paid off		40,000.00	255,225.00
			$6,125.00

The arrearages on April 30, 1906, amount to $5,800, and the advance payments to $760.

40. *Withdrawals.*—The clause in the constitution relating to withdrawals from the association is as follows: Members wishing to withdraw from said association shall be entitled to receive the net amount they have paid the association, not including fines, assessments and proportion of losses; and in addition thereto 4 per cent per annum equated time for stock two years old and upwards, and for stock less than two years old the net amount paid in less fines and taxes; provided that no additions shall be allowed for fractional parts of a year.

41. *First step.*—The accountant's first step should be to set clearly before him the work which he has to accomplish. He should then make up statements for the

year. The annual statements have been similar in form since the organization of the association; and unless there is something radically wrong in the principle of the former reports, it would be advisable for the auditor to follow the customary form, so that members who have become acquainted with former statements may be able to understand the current report and be in a position to make comparisons with former results.

These statements have included a statement of receipts and disbursements, statement of assets and liabilities, statement of number of shares of each series outstanding at the beginning of the year, number cancelled during the year, accrued interest on each series of stock to date, value of each series per share and total value of all of the stock of the various series.

42. *Method of procedure.*—In the constitution of building and loan associations an article will generally be found calling for the annual appointment of an auditing committee, whose duty it shall be to examine the books and accounts of the secretary and treasurer. It often happens, however, that the members of the auditing committee have little, if any, knowledge of accounting, or the proper method of making an audit. In consequence, the examination made by them is frequently very superficial, and discrepancies which may exist in the accounts are overlooked.

An accountant called in under circumstances similar to those assumed in the problem should make a very careful audit of the accounts of the former secretary as well as those of the treasurer. The securities should be examined in detail, not only for the purpose of verifying the total amount of the asset, but also with a view to determining that the mortgages are properly recorded, that the properties are covered by fire insur-

ance, etc. The evidence of ownership of the real estate should also be scrutinized and the accountant satisfied that the valuation is approximately correct. The balance of the cash on hand should be treated in the usual manner. Each pass book should be called in by the auditor and compared item by item with the entries in the members' ledger. The amount of unpaid interest, dues and premiums, as well as dues paid in advance, should be verified at the time of examination of the members' pass books.

43. *Statement of receipts and disbursements.*—Following the form given in the problem, a statement of receipts and disbursements would be furnished. This would be made up of the items stated in the problem, namely, balance on hand May 1, 1905, $2,500.00, and receipts during the year from various sources amounting to $258,850.00, making the total amount of cash to be accounted for, $261,350.00. The disbursements during the year as shown by the problem amounted to $255,225.00, leaving the balance on hand $6,125.00.

44. *Statement of assets and liabilities.*—The problem also furnishes the form in which the previous statements of assets and liabilities have been prepared. The first and most important liability is the amount due to members of the various series. In the form given the liability to members for dues only is shown, followed by an item called "accumulated profits." A close investigation of "accumulated profits $57,870.00," will show that it is obtained by averaging the time during which the various series have been in force (thus equated time being considered to be half the number of years which the series have run), and calculating interest on that basis at 6 per cent. For instance, the

average time of investment of the 175 shares of the second series is $5\frac{1}{2}$ years, and interest at 6 per cent has been allowed on $23,100 for the $5\frac{1}{2}$ years. This method of equating dues is not strictly correct. Applying the rule already given for finding equated time the actual average time during which the dues received from members of the second series have been on interest in the association is really $66\frac{1}{2}$ months. The average time for the third series is $60\frac{1}{2}$ months, and so on until the twelfth series is reached, the average time of which is $6\frac{1}{2}$ months. This is due to the fact that payments are received in advance.

However, inasmuch as there may be a reason other than simplicity for equating the payments on the basis of previous statements and as the statement is practically of no further value than to show the members of the association that, besides earning interest on their deposits at the rate of 6 per cent, they have accumulated, over and above such interest, a large surplus; it would probably be advisable, in order to allow of comparison with previous statements, to make it up on the same basis, as follows:

ASSETS.

Securities	$374,000.00	
Cash remaining in treasury	6,125.00	
Investments in real estate	25,000.00	
Due from members for arrearages of dues, interest and premiums	5,800.00	
Office fixtures and stationery	250.00	$411,175.00

LIABILITIES.

305	shares	3rd	series,	132	months	paid	$ 40,260.00
250	"	4th	"	120	"	"	30,000.00
375	"	5th	"	108	"	"	40,500.00
150	"	6th	"	96	"	"	14,400.00
325	"	7th	"	84	"	"	27,300.00
425	"	8th	"	72	"	"	30,600.00
500	"	9th	"	60	"	"	30,000.00
670	"	10th	"	48	"	"	32,160.00
850	"	11th	"	36	"	"	30,600.00
1595	"	12th	"	24	"	"	38,280.00
541	"	13th	"	12	"	"	6,492.00
							$320,592.00

Accumulated profit on above (figured on basis used in previous reports)	$61,522.56	
Dues paid in advance	760.00	
Reserve fund	5,000.00	$387,874.56
Surplus		$23,300.44

45. *Tracing discrepancies.*—The problem is not quite clear regarding the number of shares which were taken out in the 18th series. Among the cash receipts appears an item, "Entrance fees, $500.00." The customary entrance fee is 25 cents for each share, which would indicate that 2,000 shares were subscribed for. The problem, however, will not work out on that basis and from other information furnished us a very different result is obtained. The disbursements show that 175 shares of the second series were paid for as of September 30, 1905. This we must take to indicate that five months' dues were collected on these shares, making the total amount collected on this series of $875.00. On the various shares which were withdrawn, not including the 15 shares withdrawn on the 18th series, there was collected (and paid back) $2,000.00. On the remaining 5,445 shares in the 3d, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, and 12th series in force at the end of the year, there should have been received for dues $65,340.00, making the total amount which should have been received in dues, exclusive of the new series, $68,215.00.

The problem states that the dues actually collected during the year amounted to $75,850.00. It further appears that at the beginning of the year dues to the amount of $1,000.00 had been prepaid and that at the same time there was due members for "interest, dues and premiums" in arrears $7,000.00. During the year $108.00 in the shape of dues was returned and the advance payments at the end of the year amounted to

$760.00, while the arrearages at that time were $5,800.00.

It is, of course, impossible to determine how much of the item called "interest, dues and premiums" constituted dues. For this reason and also because the amount can easily be determined by the books and no principle is involved, we will consider the total of the arrearages as consisting entirely of dues. On this assumption, adding to the amount prepaid May 1, 1905 ($1,000.00), the dues collected during the year ($75,850.00), as well as the arrearages at the end of the year ($5,800.00), and deducting the amount paid back ($108.00), the amount due at the beginning of the year ($7,000.00), and the over payments at the end of the year ($760.00), we find that the total amount of dues which should have been received from all sources during the year is $74,782.00. Deducting from this total the amount already given, which should have been received for dues, exclusive of the 18th series ($68,215.00), we find that the members of the new series should have contributed $6,567.00.

On the fifteen shares canceled on the 18th series there was received $75.00, leaving a net difference of $6,492.00 to represent the dues on the remaining stock of this series, which would indicate that 541 shares were outstanding at the end of the year. The marked discrepancy between dues appearing to have been collected from members of the 18th series and the number of shares which evidently were subscribed for, would call for careful investigation on the part of the accountant in order to satisfy himself fully that the cash receipts had been properly entered and accounted for by the former secretary.

46. *Distribution of profits by partnership plan.*—

The next step will be to distribute the profits made by the association among its stockholders. Let us assume, in the first place, that the association carries this out according to the partnership plan, which has already been described. The method of dividing profits according to the partnership plan will be as follows:

Series.	No. shares outstanding.	Total dues paid in.	Equated time in months.	Equivalent for one month.
3rd	305	132	66½ =	$2,677,290
4th	250	120	60½ =	1,815,000
5th	375	108	54½ =	2,207,250
6th	150	96	48½ =	698,400
7th	325	84	42½ =	1,160,250
8th	425	72	36½ =	1,116,900
9th	500	60	30½ =	915,000
10th	670	48	24½ =	787,920
11th	850	36	18½ =	566,100
12th	1595	24	12½ =	478,500
13th	541	12	6½ =	42,198
				$12,464,808

The amount to be divided is the item of accumulated profit, $61,522.56, plus the surplus, $23,300.44, making a total of $84,823.00. We therefore find that the rate per cent of profit per month has been:

$$84,823 \div 124,648.08 = .6805$$

Having obtained the per cent of profit per month, we now proceed to arrive at the profit per share in the following manner:

Series.	Dues paid in on each share.	Equated time.	Equivalent to the following amount for one month.	Profit on each share at .6805%.	Total value of each share.	Total accumulated value of all shares.
3rd	132	66½	$8,778	$59.73	$191.73	$58,477.65
4th	120	60½	7,260	49.40	169.40	42,350.00
5th	108	54½	5,886	40.05	148.05	55,518.75
6th	96	48½	4,656	31.68	127.68	19,152.00
7th	84	42½	3,570	24.29	108.29	35,194.25
8th	72	36½	2,628	17.88	89.88	38,199.00
9th	60	30½	1,830	12.45	72.45	36,225.00
10th	48	24½	1,176	8.00	56.00	37,520.00
11th	36	18½	666	4.53	40.53	34,450.50
12th	24	12½	300	2.04	26.04	41,533.80
13th	12	6½	78	.53	12.53	6,778.73
						$405,399.68

The total assets are	$411,175.00	
The reserve fund, plus the dues paid in advance amount to	5,760.00	
Total to be apportioned		$405,415.00
Undivided profit		$15.32

47. *Distribution of profits according to Dexter's rule.*—Let us assume that instead of dividing the profits according to the partnership plan the association operates according to Dexter's rule, the profits to be divided on the assumption that dues only make up the items of arrearages of dues, premiums and interest:

STATEMENT OF EARNINGS FOR THE YEAR.

Interest received on loans		$23,000.00	
Premiums received on loans		1,000.00	
		$24,000.00	
Less int. and disc. acct. bills pay		603.20	
Net interest receipts			$23,396.80
Fines			500.00
Entrance fees			500.00
Rents received on real estate	$2,000.00		
Less payments of interest, taxes and expenses and repairs to real estate	1,750.00		250.00
Total net receipts for year			$24,646.80
Deduct general expenses printing and advertising		$300.00	
Secretary's salary		780.00	1,080.00
Net gain for current year			$23,566.80
Add profit forfeited on shares withdrawn			3,663.95
			$27,230.75
Deduct profit of current year distributed to maturing shareholders of second series			910.00
			$26,320.75
Add undistributed profit from former year			10.00
Total amount to be distributed			$26,330.75

The profit forfeited on shares withdrawn, assuming the values as shown by the former report, to be correct, is obtained in the following manner:

Series.	Number of shares with-drawn.	Value per share 5/1/05 per former report.	Dues paid in per share.	Accumulated profit to 5/1/05 per share.	Total accumulated profit.
Third	20	$166.90	120	$46.90	$ 938.00
Fourth	50	145.60	108	37.60	1,880.00
Sixth	200	106.90	84	22.90	4,580.00
Tenth	30	40.40	36	4.40	132.00
Twelfth	5	12.55	12	.55	2.75
Thirteenth	15	......	...	.....	....
					$7,532.75
Amount of profit paid to withdrawing stockholder.....					3,868.80
Forfeited profit					$3,663.95

The profit of current year distributed to members of second series is determined as follows:

Deduct the total dues paid in by members ($132.00 + $5.00) from the par value ($200.00) to obtain amount of profit distributed on the series ($63.00). At the beginning of the year the accumulated profit was ($189.80 less $132.00) $57.80; consequently there must have been distributed of the current profits $63.00 less $57.80 or $5.20 per share, a total of $910.00.

We now proceed to calculate the profit on each share, which is done by the following method:

Series.	No. of shares out-standing.	Value 5/1/05.	Total Value 5/1/05.
Third	305	$166.90	$50,904.50
Fourth	250	145.60	36,400.00
Fifth	375	125.50	47,062.50
Sixth	150	106.90	16,035.00
Seventh	325	88.80	28,860.00
Eighth	425	72.00	30,600.00
Ninth	500	55.90	27,950.00
Tenth	670	40.40	27,068.00
Eleventh	850	26.30	22,355.00
Twelfth	1,595	12.55	20,017.25
Thirteenth	541	......	....
	5,986		$307,252.25
Dues of current year ($5,966 × $12) $71,832.00, average investment 6½ months, or the equivalent at one year of the amount of			38,909.00
Total average investment for one year..................			$346,161.25

Net profit to be distributed ($26,330.75) divided by the average investment ($346,161.25) produces per cent of additional profit (7.606 per cent).

The "total average investment" shown in the following table is obtained by adding average investment of current dues, $6.50 per share, to the value May 1, 1905. The "total value of each share May 1, 1906," is obtained by adding to the value of each share at the beginning of the year the profit and $12.00, dues of current year.

Series.	Value 5/1/05.	Total average investment.	Profit at 7.606%.	Total value of each share 5/1/06.	Total accumulated value of stock.
3rd	$166.90	$173.40	$13.19	$192.09	$58,587.45
4th	145.60	152.10	11.57	169.17	42,292.50
5th	125.50	132.00	10.04	147.54	55,327.50
6th	106.90	113.40	8.62	127.52	19,128.00
7th	88.80	95.30	7.25	108.05	35,116.25
8th	72.00	78.50	5.97	89.97	38,237.25
9th	55.90	62.40	4.75	72.65	36,325.00
10th	40.40	46.90	3.57	55.97	37,499.90
11th	26.30	32.80	2.49	40.79	34,671.50
12th	12.55	19.05	1.45	26.00	41,470.00
13th	......	6.50	.49	12.49	6,757.09
					$405,412.44
Amount to be distributed............................					405,415.00
Undivided profit					$2.56

The greater number of societies divide their profits according to the partnership plan. Where the accountant is not certain of the plan followed he can readily ascertain it by an examination of the books. If the method has been equitable and the members understand the basis on which profits are distributed, it would be advisable to follow the customary plan. In the report which should accompany the statement the accountant might call attention to the other methods of distributing profits, as well as set forth in general the results of his examination.

CHAPTER V

THE INSURANCE BUSINESS

48. *Basis of the insurance business.*—All forms of insurance are based upon the law of averages. No one is able to tell, in the case of any single individual, how soon he will die, and as a consequence insuring a single life would be nothing but gambling. But when we take a large group of persons, either the population of a district or a given number of people scattered throughout the country or over the world, this uncertainty disappears. The untimely death of one is offset by the extraordinary longevity of another. The law of averages takes away the element of doubt and leaves in its place a mathematical definiteness upon which accurate calculations can be made.

Statisticians noticed, many years before life insurance came into vogue, the remarkable uniformity from year to year in the death rate per thousand of population of a given community. They discovered that the death rate per thousand among people of a given age was about the same in every year, but that the death rate at each age was different from the death rate of every other age, being lowest in the earlier years of human life and continually increasing as the age of the person advances. The collection and tabulation of these observations made possible scientific life insurance.

In fire insurance all buildings are classified according to construction, location, liability to destruction

from fire in the neighborhood, the character of fire protection, both public and private, and the use to which the building is put. All this information has been classified and arranged in a scientific manner and the rates have been fixed according to the experience which the fire insurance companies have had with each class. The fire insurance business is more risky than that of life insurance, because the experience of those in the business is not so uniform, and a conflagration such as the San Francisco fire will cause the losses to go much above computed figures.

49. *Laws governing insurance companies.*—In order to thoroughly understand our subject, it is well to investigate some of the provisions of law governing insurance companies. The fact that the different states are very much averse to having a foreign insurance company come within their boundaries to do business has led to the custom of taxing such a company for all the state can get out of it. The insurance commissioner is usually possessed of very great authority, and can close up a company for any slight deviation from the laws.

The laws of the various states regarding insurance companies are very diverse, especially as regards the minor details of operation. The general principles, however, are the same throughout the country, and we will use as an illustration the Pennsylvania laws.

50. *Pennsylvania laws regarding organization of insurance companies.*—Any ten persons, citizens of Pennsylvania, may draw up articles of agreement for the incorporation of a stock, fire, or life insurance company. These articles of agreement shall specify:

(1) The name of the company: the word "mutual" must appear if the company is a mutual company.

(2) The kind of insurance written, whether fire, life, health or accident insurance.

(3) The principle on which the insurance is given.

(4) The place of business.

(5) The amount of capital stock.

(6) The powers which the company expects to have.

After these articles of agreement have been drawn up, they must be acknowledged by someone empowered to receive acknowledgment of deeds, and must then be forwarded to the insurance commissioner of the state, and after this to the attorney general, for his approval.

When ten or more citizens of Pennsylvania have agreed upon the organization of a stock, fire, or life insurance company, the law provides that the books for subscription must be kept open until the full amount of capital stock specified is subscribed. The shares may not be of smaller par value than $10 each, and 10 per cent of the capital stock must be paid in at the time of subscribing. The full 100 per cent must be paid not later than six months from the time of subscription.

When one-half of the capital stock has been subscribed and 20 per cent paid in, the officers of the proposed company shall certify to the governor of the state the amount of stock, the name and address of subscribers, and the place where the money is deposited. If the governor approves he may then cause letters patent to be issued making a body corporate of the subscribers. The secretary of the commonwealth next records the approved articles of association and returns them to the company. The company in turn has them recorded in the recorder's office of the county in which it is situated. When the stock has been paid in full the company may commence business, provided its assets

have been examined by the insurance commissioner, and have been found equal to the capital stock, less the necessary expenses of organization. If he finds the assets of sufficient value, he is then in a position to issue a certificate entitling the company to issue policies in the State of Pennsylvania.

In Pennsylvania, every stock company doing a fire insurance business must have at least $100,000 of capital stock; every life insurance company must have at least $300,000 capital stock, and every health and accident insurance company must have at least $100,000 of capital stock.

51. *Supervision of investment of capital stock by the state.*—The State of Pennsylvania is not only careful to regulate the organization of insurance companies by preventing the issuing of watered stock, but it is also careful to see that the full paid capital stock is carefully invested. The law, therefore, provides that the capital stock of an insurance company can only be invested in the following forms:

1. Bonds and first mortgages on improved and unencumbered real estate in Pennsylvania, worth 50 per cent more than the loan, exclusive of buildings, unless insured, and the policies transferred to the company. These policies must be written by another company than the one making the investment.

2. Ground rents.

3. Bonds of the United States and State of Pennsylvania.

4. Bonds of any other state if at par value when purchased.

5. Bonds of any county, city or municipality in the state on which there has been no default in interest.

6. Bonds of solvent railroads in which there has been no default of interest.

52. *Investment of funds in excess of capital stock.*—The Pennsylvania law also provides that funds of any insurance company over and above the capital stock (such as the reserve or surplus) may be invested in:

(a) All the foregoing forms.

(b) In the stock or other evidence of indebtedness of any solvent, dividend-paying corporation created by any state, or the United States.

(c) May loan such money on securities, if the market value is at least 20 per cent more than the sum loaned.

The law also provides that not more than one-half of the capital stock of an insurance company may be loaned on mortgages of real estate, and that not more than one-tenth of the capital stock may be invested in a single mortgage; also, that no loans are permitted on personal security. In case a company violates any of these rules with reference to the investment of the capital stock or other surplus moneys then, according to the law, the penalty is that the directors shall be personally liable for the loss. Furthermore, the law provides that an insurance company can only hold real estate which is—

(1) Necessary for the transaction of its business.

(2) Mortgaged to it and foreclosed.

(3) Which has been conveyed in satisfaction of a debt or which has come to it at sale upon judgment.

53. *Regulation regarding dividends.*—The law also aims to protect the public by regulating the amount of dividend which insurance companies may pay:—

First, no dividend may be paid except from profits, and in calculating profits there is to be charged against the company:

(a) Capital stock together with the amount of proposed dividend.

(b) The reserve, which in the case of one-year policies we say is equal to one-half of the annual premium income, and a pro-rata portion for policies whose term is more than one year.

(c) All sums due the company on investments, of which no part of the principal or interest has been paid during the last calendar year, and for which foreclosure proceedings have not been commenced, or if judgment has been given, have remained unsatisfied for more than two years.

(d) All interest due or accrued and remaining unpaid.

(e) All other debts and obligations.

Secondly, no dividend is to be paid which exceeds 10 per cent unless its capital stock remains unimpaired, after charging as a liability in addition to the items above enumerated the entire amount of net premiums received and receivable upon all risks at the time of making such dividend.

Provision is also made for the increase in the capital stock of the company, but in any case an increase in capital stock must represent full paid stock, or the conversion of the surplus over and above all other legal requirements into the capital stock.

54. *Organization of a mutual company.*—The principal feature in connection with the organization of a mutual company is the provision for a "guarantee fund" at the time the company begins business. If the purpose is to insure lives, mutual companies must have a guarantee capital of not less than $200,000. In case of health and accident insurance companies the said guarantee capital must not be less than $100,000, and

5 per cent of this guaranteed capital must be paid in cash before commencing business.

The method of organizing such companies is the same as that for stock companies. The companies may begin to issue policies as soon as application for $200,000 of insurance has been taken.

With reference to the accumulation of a guaranteed capital, the law of Pennsylvania makes the following provisions: Subscribers to the guarantee fund must give notes for the balance (that is the amount over and above the 50 per cent required before commencing business), which shall be liable to assessment from time to time for all purposes of carrying on the business, including the reserve. The subscribers to this guarantee fund may receive interest from the company semi-annually at a rate not exceeding 6 per cent provided there is a net balance over and above the reserve liability. When the assets of the company shall exceed the reserve and other liabilities, to an amount equal to the guarantee fund, the directors of the company may return such portion to the subscribers as they think is warranted; but the law expressly says that no more than this sum with interest shall be returned.

CHAPTER VI

LIFE INSURANCE

55. *Mortality table.*—The basis of the life insurance business is the mortality table, of which there are many forms in use. The "Actuarial Mortality Table" which represents the experience of a number of insurance companies is a commonly used table. Another is the "American Experience Table of Mortality," which represents the experience of a number of American insurance companies. The Actuarial Table of Mortality is as follows:

ACTUARIES' TABLE OF MORTALITY.

Age.	Number Living.	Number Dying.	Yearly Probability of Dying.	Yearly Probability of Surviving.
10	100,000	676	.0067600	.9932400
11	99,324	674	.0067859	.9932141
12	98,650	672	.0068119	.9931881
13	97,978	671	.0068484	.9931516
14	97,307	671	.0068959	.9931041
15	96,636	671	.0069434	.9930566
16	95,965	672	.0070026	.9929974
17	95,293	673	.0070625	.9929375
18	94,620	675	.0071336	.9928664
19	93,945	677	.0072064	.9927936
20	93,268	680	.0072909	.9927091
21	92,588	683	.0073768	.9926232
22	91,905	686	.0074641	.9925359
23	91,219	690	.0075643	.9924357
24	90,529	694	.0076659	.9923341
25	89,835	698	.0077700	.9922300
26	89,137	703	.0078866	.9921134
27	88,434	708	.0080061	.9919939
28	87,726	714	.0081389	.9918611
29	87,012	720	.0082750	.9917250
30	86,292	727	.0084248	.9915752
31	85,565	734	.0085784	.9914216
32	84,831	742	.0087468	.9912532
33	84,089	750	.0089191	.9910809

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Age.	Number Living.	Number Dying.	Yearly Probability of Dying.	Yearly Probability of Surviving.
34	83,339	758	.0090955	.9909045
35	82,581	767	.0092877	.9907123
36	81,814	776	.0094849	.9905151
37	81,038	785	.0096867	.9903133
38	80,253	795	.0099064	.9900936
39	79,458	805	.0101311	.9898689
40	78,653	815	.0103619	.9896381
41	77,838	826	.0106118	.9893882
42	77,012	839	.0108943	.9891057
43	76,173	857	.0112509	.9887491
44	75,316	881	.0116973	.9883027
45	74,435	909	.0122120	.9877880
46	73,526	944	.0128389	.9871611
47	72,582	981	.0135157	.9864843
48	71,601	1,021	.0142595	.9857405
49	70,580	1,063	.0150611	.9849389
50	69,517	1,108	.0159386	.9840614
51	68,409	1,156	.0168982	.9831018
52	67,253	1,207	.0179473	.9820527
53	66,046	1,261	.0190927	.9809073
54	64,785	1,316	.0203133	.9796867
55	63,469	1,375	.0216643	.9783357
56	62,094	1,436	.0231261	.9768739
57	60,658	1,497	.0246793	.9753207
58	59,161	1,561	.0263856	.9736144
59	57,600	1,627	.0282464	.9717536
60	55,973	1,698	.0303362	.9696638
61	54,275	1,770	.0326116	.9673884
62	52,505	1,844	.0351204	.9648796
63	50,661	1,917	.9378998	.9621602
64	48,744	1,990	.0408256	.9591744
65	46,754	2,061	.0440818	.9559182
66	44,693	2,128	.0476138	.9523862
67	42,565	2,191	.0514741	.9485259
68	40,374	2,246	.0556300	.9443700
69	38,128	2,291	.0600872	.9399128
70	35,837	2,327	.0649328	.9350672
71	33,510	2,351	.0701581	.9298419
72	31,159	2,362	.0758049	.9241951
73	28,797	2,358	.0818834	.9181166
74	26,439	2,339	.0884679	.9115321
75	24.100	2,303	.0955602	.9044398
76	21,797	2,249	.1031794	.8968206
77	19,548	2,179	.1114692	.8885308
78	17,369	2,092	.1204444	.8795556
79	15,277	1,987	.1300648	.8699352
80	13,290	1,866	.1404064	.8595936
81	11,424	1,730	.1514357	.8485643
82	9,694	1,582	.1631938	.8368062
83	8,112	1,427	.1759121	.8240879
84	6,685	1,268	.1896785	.8103215
85	5,417	1,111	.2050951	.7949049
86	4,306	958	.2224804	.7775196
87	3,348	811	.2422340	.7577660
88	2,537	673	.2652741	.7347259

Age.	Number Living.	Number Dying.	Yearly Probability of Dying.	Yearly Probability of Surviving.
89	1,864	545	.2923820	.7076180
90	1,319	427	.3237300	.6762700
91	892	322	.3609866	.6390134
92	570	231	.4052632	.5947368
93	339	155	.4572271	.5427729
94	184	95	.5163043	.4836957
95	89	52	.5842697	.4157303
96	37	24	.6486486	.3513514
97	13	9	.6923077	.3076923
98	4	3	.7500000	.2500000
99	1	1	1.0000000	.0000000

56. *The calculation of premiums.*—The operation of this table is easily understood. The table begins with 100,000 persons living at the age of 10. We find that this number gradually dwindles; that in the 11th year, for example, 676 of the original 100,000 die. The percentage of deaths continually increases while the number of survivors is constantly diminishing, with the result that at the beginning of the 99th year only one of the original 100,000 survives, and at the beginning of the 100th year the original number has entirely disappeared.

Looking at it from another standpoint we find that at age 35, 82,581 people of the original 100,000 are living; at age 50, 69,517; at age 70, 35,837, and at age 85, 5,417. If we express the number dying during each year as the percentage of those living at the beginning of the year we have a measure of the probabilities of deaths during that particular year. This calculation and its converse is represented by the last two columns of the table.

It will be seen that the probability of death is exceedingly low during the early years; that in the 22d year a man has a little over 7 chances in 1,000 of dying; that in the 55th year his chances of death are almost four times greater or 20 in 1,000; that in the 61st year

they are 30; that in the 75th year they have gone to 95, and finally in the 98th year they are 750 out of 1,000.

The principle of life insurance is to apply the foregoing results in such a way as to cause those who live to share the losses of those who die. Life insurance, therefore, is essentially a mutual proposition. The members of a life insurance company really insure each other, for the funds out of which death losses are paid are drawn primarily from the insured members themselves. The man who lives past the average period of life pays a greater amount than is necessary to enable the company to meet his own obligation had they been insuring him as an individual and not as one of a class. The excess goes to pay a portion of the loss sustained on another member who died before reaching the average time of life.

57. *Natural premium plan.*—There are two plans of life insurance in general use. The first is called the "natural premium plan" and the second the "reserve" or "level premium plan." In the natural premium plan enough is collected from each insured member at the beginning of each year so that the total sum, together with interest earned during the year, will give the company just sufficient funds to meet the death claims for that period. It follows that since the chances of death increase as the insured grows older the premiums which he pays to the company increase each year. The reason for this is evident.

If we turn to the mortality table we find that at the age of 35 82,581 of the original 100,000 people will be alive and that during the 36th year 767 people will die. If we assume that each one of these persons carries $1,000 of insurance, it follows that the company will have to pay out in the 36th year $767,000 in death claims. This amount must be collected from the num-

ber of people who began that year; or, in other words, from the 82,581 persons surviving at the age of 35. We see that the amount which the company must collect would be obtained by dividing 82,581 into $767,000, giving us $9.29 as the sum which must be collected from each member for that year. This excludes expenses and the interest which the company can earn from the investment of the premiums during the period. If we take the next year we find that the burden is a little heavier. There are at that time 81,814 people with insurance in force. The deaths during this year are 776, requiring $776,000 of the company. The assessment, therefore, would be $9.49 per person, an increase of 20 cents over the preceding year.

Looking down the table we find that at age 60, 55,973 of the original 100,000 would still be alive. During the next year 1770 deaths would occur, requiring the company to raise $1,770,000. The assessment, therefore, for the 61st year would be $31.62. At age 90 1319 of the original policy holders would survive. The deaths during the next year would be 427, requiring $427,000. To meet this burden would require the payment of a premium of $323.73 by each policy holder, almost one-third of the total amount guaranteed by the insurance company to the policy holder upon his death.

This comparison illustrates the advantages and disadvantages of the natural premium plan. We see in the first place that the premiums paid are very low—and hence very attractive—when the insured is young. The advantage which he secures during youth, however, he pays for in his old age, for the rates rapidly increase after middle life is passed, and during the later years become almost prohibitive.

58. *Fraternal insurance.*—Many of the fraternal

orders use an unscientific modification of the natural premium plan. They lump together their membership of all ages and collect the same premiums from each. The death claims of each month are pro-rated among the living according to the amount of insurance which each has taken out. This means that the younger members of the order are paying a part of the death claims of the older members. The plan works satisfactorily so long as the entire membership is young because the assessments then are small, but unless new blood is constantly being taken into the order the average age of the members will steadily increase and the assessments will grow rapidly until finally they become prohibitive. If the percentage of old and young members has not been maintained, experience has shown that the younger members will drop out, leaving the aged and comparatively helpless to bear the enormous burden. This is effectively shown by the following comparison of a young and an old mutual association for the same period of years.

The first is an association organized in 1892. The record of death rates, together with the amount of insurance in force, is shown in the following table:

Year.	Amount of insurance in force.	Death-rate per 1,000.
1897	$5,419,000	2.4
1898	5,903,000	3.9
1899	6,350,000	3.9
1900	7,753,000	4.2
1901	8,560,500	6.0

Let us compare with this a society organized in 1879 which in its insurance in force rose to a high rank (had outstanding something like $130,000,000 in risks), but which in later years has been losing in numbers, and the average age of whose members has likewise largely

increased. The record for the same period is as follows:

Year.	Amount of insurance in force.	Death-rate per 1,000.
1897	$51,612,500	26.9
1898	44,023,500	30.2
1899	37,294,500	32.0
1900	17,073,500	40.8
1901	10,736,500	43.3

59. *Level premium plan.*—The disadvantages of the natural premium plan are so manifest as to cause most of our insurance to be based upon the "reserve" or "level premium plan." The principle of the level premium plan is to collect from each insured person a certain sum based upon the age at which he takes out his policy, which premium shall remain unchanged throughout his life. The sum which is paid is greater than would be required under the natural premium plan during the early years of the period, but on the other hand it is smaller than that required during the later years. Under the level premium plan assessments collected during the first years are held in reserve, invested and accumulated at compound interest so as to meet the discrepancy between the death losses and the annual premium payments during the later years.

This insurance reserve is really different at every moment of the day and every day in the year. It is frequently defined as the fund which a life insurance company must have invested at a given time so that the amount of the original fund, together with the accretions from interest at the rate of return assumed by the company and the expectation of receipts from future premiums according to the mortality table will enable the company to pay all future death claims under its existing policies.

60. *Reserve.*—There are several elements in the ques-

tion of reserve which require a consideration. The first concerns the rate of interest assumed. Most of the reserve tables are based upon the assumption that the company will be able to earn a certain rate of interest upon its money. We have, for example, a 4 per cent table and a 3 per cent table, the latter being the one most commonly used. The reserve, according to this table, must be increased each year by the moneys received from investments at the rate of 3 per cent per year in order to give the company sufficient money to meet future death claims. If the company is able to earn more than 3 per cent on its money it will have on hand a sum larger than its required reserve; and every well-managed company is able to do this. These excess earnings, together with profits accruing from fortunate investments, constitute the company's "surplus," which might be defined as the excess of assets over and above the sum which the company should have to meet its mathematically ascertained death losses of the future.

61. *Illustration of operation of the reserve.*—The subject of the insurance reserve is important to the accountant, and one of the most important parts of his examination of the accounts of insurance corporations is to ascertain its sufficiency. It is necessary, therefore, for us to understand its operation. Take as an example a person 21 years of age who takes out a "whole life policy" of $10,000. The whole life policy is one in which the insured agrees to pay the stated annual premium throughout his entire life. In this calculation we will have to use the actuarial table showing the amount which should be paid on such a policy, which, however, we have not space to insert here. This table merely represents a mathematical calculation of the annual sum to be contributed according to the prin-

ciples already laid down. In our calculation we leave out of consideration what is known as "loading" or the amount which the company adds to the sum which must be collected to cover the expenses of conducting the business and the commissions paid to the agents. This sum to which no "loading" has been added is known as the "net annual premium."

At age 21, the net premium is	$13.27
Cost of first year's insurance is	7.05
Leaving as a contribution to the reserve	$6.22

Reducing the risk on the policy to $993.78.

The item "cost of first year's insurance" is merely the pro-rated proportion of the losses from death claims during the first year on all the policies of this class held at the beginning of the year by persons of age 21. In other words it is the natural premium for age 21.

Omitting the calculations for a number of years we find that if this member lives to the age 50 his net annual premium is

still	$13.27
"Cost of insurance" during subsequent year	10.10
Leaving as contribution to the reserve	3.17

Notice that, owing to advancing age and its attendant greater chances of death, the "cost of insurance" or "natural premium" is much larger than at age 21, leaving a much smaller excess of the level premium to be carried to the reserve; yet the contributions of the previous years, together with interest thereon, have brought this reserve up to $303, leaving the risk on the policy at $697.

If the member lives to age 75, the reserve will have reached $680.07 reducing the risk to $319.93. Although the cost of insurance or natural premium will exceed the level premium, yet the reserve will continue to increase thus:

Reserve at beginning of 75th year			$680.07
Net premium	$13.27		
Int. added to reserve	27.73	41.00	
Less "cost of insurance"		27.06	
Added to reserve			13.94
Reserve at end of year			$694.01

Thus the reserve on a single policy continues to grow until at the beginning of the 99th year (if the insured lived so long) it would be just a little short of $1,000. The premiums received and interest earned would bring it up to $1,000 by the end of that year, by which time, according to the mortality table, the policy would call for payment.

62. *Mortality table showing reserve.*—The following table, while further showing how the reserve is accumulated, shows also that the total reserve on all policies granted to persons of a given age while increasing for a few years, eventually enters upon a period of decline, due to the deaths of the insured and the payment of their policies.

This information for the entire class was collected and tabulated by the New York Life Insurance Company and formed one of their exhibits at the Chicago Exposition in 1893. It gives a real understanding of the operation of an insurance company.

MORTALITY TABLE SHOWING RESERVE

Age.	Number Surviving.	Number Deaths.	Premiums.	Interest.	Total Income.	Death Claims.	Reserve Fund End of Each Year.
35	82,581	767	$1,640,884.47	$ 65,635.38	$ 1,706,519.85	$ 767,000	$ 939,519.85
36	81,814	776	1,624,826.04	102,573.84	1,727,399.88	776,000	1,890,919.73
37	81,038	785	1,610,225.06	140,045.79	1,750,270.85	785,000	2,856,190.58
38	80,253	795	1,594,627.11	178,032.71	1,772,659.82	795,000	3,833,850.40
39	79,458	805	1,578,830.46	216,507.23	1,795,337.69	805,000	4,824,188.09
40	78,653	815	1,562,048.58	255,449.47	1,817,498.05	815,000	5,826,686.14
41	77,838	826	1,546,641.06	294,933.08	1,841,574.14	826,000	6,842,260.28
42	77,012	839	1,530,228.44	334,899.55	1,865,127.99	839,000	7,868,388.27
43	76,173	857	1,512,795.78	375,247.36	1,888,043.14	857,000	8,899,431.41
44	75,316	881	1,496,528.92	415,838.41	1,912,367.33	881,000	9,930,798.74
45	74,435	909	1,479,028.45	456,387.89	1,935,416.34	909,000	10,957,215.08
46	73,526	944	1,460,226.36	496,697.66	1,956,924.02	944,000	11,970,139.10
47	72,582	981	1,442,204.34	536,493.74	1,978,698.08	981,000	12,967,837.18
48	71,601	1,021	1,421,995.86	575,593.32	1,997,589.18	1,021,000	13,944,426.36
49	70,580	1,063	1,402,424.60	613,874.04	2,016,298.64	1,063,000	14,897,725.00
50	69,517	1,108	1,380,607.62	615,133.30	2,031,740.92	1,108,000	15,821,465.92
51	68,409	1,156	1,359,236.83	687,280.11	2,046,516.94	1,156,000	16,711,982.86
52	67,253	1,207	1,336,317.11	721,932.00	2,058,249.11	1,207,000	17,563,231.97
53	66,046	1,261	1,311,673.56	754,996.22	2,066,669.78	1,261,000	18,368,901.75
54	64,785	1,316	1,287,277.95	786,247.19	2,073,525.14	1,316,000	19,126,426.89
55	63,469	1,375	1,261,129.03	815,502.24	2,076,631.27	1,375,000	19,828,058.16
56	62,094	1,436	1,233,186.84	842,449.80	2,075,636.64	1,436,000	20,467,694.80
57	60,658	1,497	1,205,274.46	866,918.77	2,072,193.23	1,497,000	21,042,888.03
58	59,161	1,561	1,175,529.07	888,736.68	2,064,265.75	1,561,000	21,546,153.78
59	57,600	1,627	1,144,512.00	907,626.63	2,052,138.63	1,627,000	21,971,292.41
60	55,973	1,698	1,111,623.78	923,316.65	2,034,940.43	1,698,000	22,308,232.84
61	54,275	1,770	1,078,444.25	935,467.08	2,013,911.33	1,770,000	22,552,144.17
62	52,505	1,844	1,043,274.35	943,816.74	1,987,091.09	1,884,000	22,695,235.26
63	50,661	1,917	1,006,127.46	948,054.51	1,954,181.97	1,917,000	22,732,417.23
64	48,744	1,990	968,543.28	948,038.42	1,916,581.70	1,990,000	22,658,998.93
65	46,754	2,061	929,235.75	943,529.39	1,872,765.14	2,061,000	22,470,764.07
66	44,693	2,128	887,879.51	933,825.74	1,821,705.25	2,128,000	22,164,469.32
67	42,565	2,191	845,340.90	920,392.41	1,765,733.31	2,191,000	21,729,202.63
68	40,374	2,246	802,231.38	901,657.36	1,703,888.74	2,246,000	21,197,091.37
69	38,128	2,291	757,603.36	878,187.79	1,635,791.15	2,291,000	20,541,882.52

MORTALITY TABLE SHOWING RESERVE—(*Continued*)

Age.	Number Surviving.	Number Deaths.	Premiums.	Interest.	Total Income.	Death Claims.	Reserve Fund End of Each Year.
70	35,837	2,327	711,902.00	880,151.88	1,562,053.88	2,327,000	19,776,985.90
71	33,510	2,351	665,843.70	817,711.18	1,483,554.88	2,351,000	18,909,490.78
72	31,159	2,362	618,817.74	781,132.34	1,399,950.08	2,362,000	17,947,440.86
73	28,797	2,358	572,196.39	740,785.50	1,312,981.89	2,358,000	16,902,422.75
74	26,439	2,339	525,078.54	697,100.05	1,222,178.59	2,339,000	15,785,601.34
75	24,100	2,303	478,867.00	650,578.78	1,129,445.78	2,303,000	14,612,047.07
76	21,797	2,249	433,106.39	601,806.14	1,034,912.53	2,249,000	13,397,959.60
77	19,548	2,179	388,418.56	551,455.13	939,873.69	2,179,000	12,158,833.29
78	17,369	2,092	344,948.34	500,151.27	845,099.61	2,092,000	10,911,932.90
79	15,277	1,987	303,553.99	448,619.48	752,173.47	1,987,000	9,677,106.37
80	13,290	1,866	264,072.30	397,647.15	661,719.45	1,866,000	8,472,825.82
81	11,424	1,730	226,880.64	347,988.26	574,868.90	1,730,000	7,317,694.72
82	9,694	1,582	192,619.78	300,412.58	493,032.36	1,582,000	6,228,727.08
83	8,112	1,427	161,104.32	255,593.36	416,697.68	1,427,000	5,218,424.76
84	6,685	1,268	132,897.80	214,052.90	346,950.70	1,268,000	4,297,375.46
85	5,417	1,111	107,581.62	176,198.28	283,779.90	1,111,000	3,470,155.36
86	4,306	958	85,560.22	142,228.62	227,788.84	958,000	2,739,944.20
87	3,348	811	66,474.54	112,256.75	178,731.29	811,000	2,107,675.49
88	2,537	673	50,410.19	86,323.43	136,733.62	673,000	1,571,409.11
89	1,864	545	37,056.32	64,838.62	101,894.94	545,000	1,127,804.05
90	1,319	427	26,182.15	46,159.45	72,341.60	427,000	773,145.65
91	892	322	17,724.04	31,634.79	49,358.83	322,000	500,504.48
92	570	231	11,325.90	20,473.22	31,799.12	231,000	301,303.60
93	339	155	6,732.54	12,321.45	19,053.99	155,000	165,357.59
94	184	95	3,657.92	6,760.62	10,418.54	95,000	80,776.13
95	89	52	1,767.09	3,301.73	5,068.82	52,000	33,844.95
96	37	24	735.37	1,383.21	2,118.58	24,000	11,963.53
97	13	9	258,21	488.87	747.08	9,000	3,710.61
98	4	3	79.47	151.60	231.07	3,000	941.68
99	1	1	19.86	38.46	58.32	1,000	Nothing.

63. *Operation of the table.*—Our mortality table shows us that at the age 35, 82,581 persons will survive. It is presumed also that each of these has taken out a whole life policy of $1,000, the annual premium for which is $19.86.

This means $1,640,884.47 in premiums the first year, which earns $65,635.38 in interest, bringing the total income to $1,706,519.85. But 767 persons die, necessitating the payment of $767,000 on their policies, leaving $939,515.85 for the reserve at the end of the first year. Only $1,624,826.04 is collected during the next year in premiums from the remaining 81,814 policy holders; but interest on these premiums receipts and on the above mentioned contribution to the reserve brings the total income up to $1,727,399.88, which, after the payment of $776,000 in new death claims, leaves $951,399.88 for the reserve, bringing the latter up to $1,890,919.73.

At age 62, the reserve against 50,661 policies remaining is $22,695,235.26. The premium receipts on these policies amount to $1,006,127.46, while interest on these and on the reserve brings the total income up to $1,954,181.97. The death claims are $1,917,000, so that the reserve is increased only by $37,181.97 to $22,732,417.23.

The 48,744 policy holders surviving at age 64, contribute only $968,543.28 in premiums. Interest brings the total income up to $1,916,581.70. But the death claims this year call for $1,990,000, reducing the reserve $73,418.30 or to $22,658,998.93. From this point the total reserve dwindles until at the beginning of the 99th year there is only $941.68 left. But this covers only one policy, all the others having been paid in full. The $19.86 received from this policy holder plus the $38.46 of interest earned during the year will bring the

reserve up to $1,000, just enough to pay this last policy, leaving reserve at nothing at the end of the year.

64. *The "reserve" a liability.*—The computation of the insurance reserve against each of the many kinds of policies issued by a large company is a complicated actuarial problem. This computation must be made each year by the state insurance commissioner whose duty it is to ascertain if the company is maintaining a proper reserve. If the company's reserve falls below the required amount it is declared to be insolvent and is prevented from taking new business. In practice the auditor of a life insurance company's accounts accepts the results of the insurance commissioner's work in this matter even although the computation of this liability is the central feature of life insurance accounting. The ordinary accountant does not, indeed, possess sufficient knowledge of mathematics to enable him to make the computation.

The insurance reserve is one of the best examples of what is known as a "non-ledger liability" or, in other words, a liability which is not shown on the ledger. None of the books of the insurance companies actually show that the proper reserve is maintained for each policy or each class of policies.

CHAPTER VII

ACCOUNTING SYSTEM OF A LIFE INSURANCE COMPANY

65. *Insurance a cash business.*—The accounting system of an insurance company is almost as simple as that of a building and loan association; indeed, there is very little difference between them. The business of a life insurance company, like that of all other insurance companies, is regarded as being concerned only with cash receipts and payments, and the entries are made in accordance with this theory. Insurance companies sell but one commodity—namely, protection against death, fire or accident. They receive in return from their patrons compensation in the form of cash. When premiums are overdue no entry is made to show that they have not been paid. This information is given by the absence of a credit on the policy holder's ledger account. Policy holders may die and the company be liable for the payment of the death claim, but no entry is made until the claim is actually settled, everything but cash transactions being ignored as far as the books are concerned.

66. *Principal books.*—The books of insurance companies consist essentially of a series of cash books, with the necessary ledgers. The principal book used in recording receipts is the general cash journal. Subsidiary to this there are a number of cash books recording the different sources from which income is derived. The more common of the subsidiary cash books kept are

the agent's cash book, the home office cash book, the foreign cash book and the cash expenditure book. The agent's cash book contains the record of moneys received from agents both for the first premium paid at the time the policy is issued and also for such subsequent premiums as may have been paid by the policy holder to the agent instead of direct to the company. In the home office cash book are entered the receipts from all insurance which has been issued directly through the home office. The foreign cash book contains a record of all moneys received from policy holders residing in districts served by the company's branch offices. The cash expenditure book records all outlays which the insurance company makes for the current expenses of its business and the compensation of its agents, as well as for the purchase of securities.

The results shown by these various subsidiary cash books are assembled, before posting, in a general cash journal. The general cash journal is a columnar book which contains a special column for each of the more frequently used accounts in the general ledger, those on the debit side being: Premiums, real estate, interest, loans, mortgages; and on the credit side: Dividends to policy holders, agents' commissions, medical examination, postage and exchange, agents' salaries, general expense, traveling expense, death claims, surrender value, matured insurance, mortgages, and bills receivable. In addition a sundry column is provided for the debits and credits to the accounts infrequently used.

67. *General ledgers.*—It would be feasible for an insurance company to dispense entirely with a general ledger, such as is usually carried by other businesses. The footings at the bottom of each column in the general cash journal constitute, in effect, a statement show-

ing the exact condition of the business as regards its receipts and payments. It is customary, however, for an insurance company to keep a more permanent record of the monthly results than the general cash journal affords and this is done through a general ledger. The totals of the various columns are posted at the end of each month to their respective ledger accounts. The form of the general ledger differs in no way from ordinary ledger ruling.

In theory, the general ledger premium account should act as a controlling account over the totals of all entries for premiums received as shown by the accounts of policy holders in the policy ledger; that is to say, the balance of the premium account in the general ledger should equal the aggregate of all premiums credited in the accounts of the policy holders. In practice, however, this control is very incomplete. The great number of policy holders' accounts makes it practically impossible to secure an easy and economical verification. It must be borne in mind, also, that the general ledger fails to give some of the results which might be expected in view of the theory concerning the purpose of this book. It fails to show either the face value of any policy (except those that have been canceled through the payment of the death claims), or the reserve which is kept against those still in force.

68. *Policy holders' ledger.*—A second set of ledgers kept by an insurance company is the policy holders' ledgers. These are either a large number of books containing the accounts of the various customers of the company, or the accounts kept on cards filed in the usual manner. If book ledgers are used they may be either permanently bound, or consist of loose leaves kept together in a binder.

If a permanently bound book is used it is practically impossible to so arrange the books as to provide for insertions at later dates in the proper alphabetical order. For example, Adam H. Brown may become a policy holder. His account should be opened on a certain page where it would naturally fall under an alphabetical arrangement. It is very probable that this portion of the ledger will be filled up and his account given some irregular location, causing constant inconvenience. In such cases the company relies upon a card index to find the folio of the book in which the account is kept. A. H. Brown's name must be looked up in the card catalogue and the folio and book number thus ascertained. This plan is not the most economical because of the extra labor entailed in making the card index and the time consumed in finding the account if the index card has been misplaced or lost. The best form of book ledger is the ordinary loose leaf ledger. This permits of the regular arrangement of accounts no matter how many new accounts may be opened. When a policy holder dies the page containing his account is removed from the ledger and filed for future reference. When new accounts are opened new pages are inserted in their proper place.

The final method of keeping the policy holders' ledgers is upon cards. It has practically no advantage over the loose leaf ledger and is open to the objection, always applicable to this method of keeping accounts, that the cards are liable to be lost through the carelessness of a bookkeeper. This method, therefore, is not generally used.

Insurance companies keep duplicate sets of policy holders' ledgers, the first being kept in the bookkeeping department for the purpose of keeping the company in-

formed of the status of each policy holder's account. These accounts are usually arranged alphabetically. The second set of policy holders' ledgers is kept in the actuarial department and contains exactly the same information. The cards, however, instead of being arranged alphabetically are classified according to the type of policy.

The actuaries are charged with the duty of seeing that the company at all times maintains the proper mathematical reserve against every class of policy. In order to enable them to do this it is necessary that the accounts be so kept that they can secure the needed information. To accomplish this the policy ledger accounts in the actuarial department are first divided on the basis of the various types of policies which the company has outstanding. The policy holders of each type are again subdivided on the basis of the age at which their policies were issued; for example, all the twenty-payment-life policies are grouped together in one class; the straight life policies constitute another class, and the endowment policies another. In the case of the twenty-payment-life, all those who took out their policies at the age of 21 are grouped together; those at 22 form another group, and so on.

The ledger card used by one of the large insurance companies is shown in Form 8 (page 84).

69. *Records of overdue premiums and investments.*—When a company desires to secure a record of the total amount of premiums that are due but unpaid at any time, which must be done in preparing the annual report, it is necessary for the bookkeepers to go through every ledger containing policy accounts, taking from each the amount of premiums unpaid and tabulating these results upon adding machines. This laborious

NAME AND DESCRIPTION OF POLICY

No................. **Name**......................................

Agency..................................

Prem. date..................
Pol. date..................... **Age**.....**Kind**..........................
Term Ins......**days $**.........

$...................... **Yearly Prem.** ....

Prem. Notes	**Any other Notes**		
$.........	....	......**yrs. paid to**..........................	....

Form 3—Ledger Card

process results in a record which is manifestly subject to errors, although great care is used in its preparation.

In addition to the records already described an insurance company must keep an account of its investments. The enormous assets of an insurance company are composed largely of securities, the most important of which are real estate, mortgages, and the stocks and bonds of many corporations. Accurate records must be kept of these investments, which is usually done in a very informal manner. A list is kept of the various classes of securities which the company owns. There is, for example, a mortgage register, a bond register and a stock register. In these records an entry is made of the par value, the name of the security, the rate of interest which the security bears, the due date in the case of a bond, the interest periods and the price paid.

70. *Annual report.*—Our last inquiry deals with the annual report which the company makes to its policy holders. Many of the items shown in this report, such as premiums overdue or premiums not yet due, do not appear in any of the books, but represent compilations made by the accounting department. The form of report is as follows:

SIXTY-FIRST ANNUAL STATEMENT, PENN MUTUAL LIFE INSURANCE CO.

Receipts.		Disbursements.	
For Premiums and Annuities	$ 16,220,551.62	Death Claims	$ 4,317,447.38
For Interest, etc.	4,889,327.68	Matured Endowments and Annuities	1,451,804.05
		Surrender Values	1,760,387.66
Total	$ 21,109,879.30	Premium Abatements[1]	1,483,755.30
		Total Paid Policyholders	$ 9,013,394.39

[1] In addition to the above abatements the Company allotted to deferred distribution policies $935,189.18, making the total apportionment of surplus during 1908—$2,418,944.48.

DISBURSEMENTS—(*continued*)

Installment payments.	$ 167,329.79
Pennsylvania and other State Taxes.....	502,366.66
Salaries, Medical Fees, Office and other Legal Expenses	546,847.96
Commission to Agents and Rents	1,766,666.86
Agency and other Expenses	120,552.02
Advertising, Printing, Supplies, Postage, etc.	106,154.73
Office Furniture, Maintenance of Properties, etc.	579,312.91
Total	$ 12,802,625.32

(Bonds and stocks valued at market quotations, December 31, 1908.)

ASSETS.

State, Municipal, Railroad and other Bonds, at market value, December 31, 1908	$ 36,991,985.55
Bank and other Stocks at market value, December 31, 1908....	457,266.00
Mortgages and Ground Rents, 1st Liens (Valuation $97,461,950)	39,345,534.93
Premium Notes secured by Policies, etc. (Reserve value $2,618,000)	2,095,038.05
Policy Loans (Reserve value $15,909,000)..	12,727,957.00
Loans on Bonds, Stocks, etc.	2,735,280.94
Home Office, Boston Office and other Real Estate	2,155,708.22
Cash on deposit in Company's office ...	572,315.41
Net Deferred and Unreported Premiums.	1,821,246.68
Interest and Rents Due and Accrued, etc.	1,232,043.86
Gross Assets Dec. 31, 1908........	$100,134,376.64

LIABILITIES.

Reserve at $3\frac{1}{2}$ and 4 per cent, as required by law		$ 83,122,792.00
Additional Policy Reserve, in Excess of State Requirements.		1,905,640.00
Policy Claims awaiting Proof		487,202.68
Premiums paid in Advance and other Liabilities		1,273,077.42
Accumulations upon Deferred Distribution Policies		6,861,657.79
Dividend award for 1909.	$2,600,000.00	
Surplus for all other Contingencies..	3,484;006.75	6,484,006.75
Gross Assets, as above		$100,134,376.64

New Business "paid for" in 1908, 22,239 Policies for $68,124,877.00	Insurance Outstanding December 31, 1908, 177,518 Policies for $446,688,236.00

71. *Annual report to insurance commissioner.*—The company is also required to make an annual report as of some stated date, usually December 31, to the insurance commissioner of every state in which the company does business. This report covers a complete statement of the condition of the company both as regards its finances and its outstanding policies in all their various phases. As the various divisions of the report, called "capital stock," "income," "disbursements," "ledger assets," and "liabilities," set forth the peculiar features of insurance accounting, we herewith submit copy of that part of the report. (Form 9, pages 88–95.)

72. *The books and the annual report.*—The statement of assets and liabilities as submitted to the state in the annual report is again somewhat at variance with the condition of the insurance company as shown by its books. Taking up first the statement of assets, we find that the first portion of this statement is derived from the general ledger. Following this we have the classification of non-ledger assets. Under this heading is included past due premiums and also the difference between the market value and the book value of securities owned, where the market value is greater than the book value. To this is added interest and rents, which are due and accrued but not yet paid. There is then deducted from the total all items which are not allowed by the insurance commissioner; for example, the company is carrying on its books stationery, office furniture and perhaps an expensive home office which the law does

ANNUAL STATEMENT OF THE ....INSURANCE CO.

	I.—CAPITAL STOCK.			
1.	Amount of Capital paid up in cash,	$........		
2.	Amount of Ledger Assets (as per balance) December 31 of previous year,		$........	
3.	............crease of Capital during the year,		....	
4.	Extended at		....	$........
	II.—INCOME.			
5.	First year's premiums on original policies, without deduction for commissions or other expenses, less $........ for first year's reinsurance,	$........		
6.	Surrender values applied to pay first year's premiums,	....		
7.	Total first year's premiums on original policies,	$........		
8.	Dividends applied to purchase paid-up additions and annuities,	....		
9.	Surrender values applied to purchase paid-up insurance and annuities,	....		
10.	Consideration for original annuities involving life contingencies,	....		
11.	Consideration for supplementary contracts involving life contingencies,	....		
12.	Total new premiums,	....	$........	
13.	Renewal premiums (in addition to items 14, 15 and 16), without deduction for commissions or other expenses, less $........ for reinsurance on renewals	$........		
14.	Dividends applied to pay renewal premiums,	....		
15.	Surrender values applied to pay renewal premiums,	....		
16.	Renewal premiums for deferred annuities,	....		
17.	Total renewal premiums,	....	....	
18.	Total premium income,	....	$........	
19.	(A) Consideration for supplementary contracts not involving life contingencies,	....	....	
20.	Dividends left with the company to accumulate at interest	....	....	
21.	Ledger assets, other than premiums, received from other companies for assuming their risks,		....	

FORM 9—Annual Report

22.	Gross interest on mortgage loans,	$		
23.	Gross interest on collateral loans, per Schedule C,			
24.	Gross interest on bonds and dividends on stocks, less $........ accrued interest on bonds acquired during 1908, per Schedule D,			
25.	Gross interest on premium notes, policy loans or liens,			
26.	Gross interest on deposits in trust companies and banks,			
27.	Gross interest on other debts due the company			
28.	Gross discount on claims paid in advance,			
29.	Gross rent from company's property, including $........ for company's occupancy of its own buildings, per Schedule A			
30.	Total gross interest and rents,		$	
31.	From all other sources (give items and amounts):			
32.				
33.				
34.				
35.				
36.				
37.	From agent's balances previously charged off,	$		
38.	Gross profit on sale or maturity of ledger assets, viz.:			
	(a) Real estate, per Schedule A,			
	(b) Bonds, per Schedule D,			
	(c) Stocks, per Schedule D,			
39.	Gross increase in book value of ledger assets, viz.:			
	(a) Real estate, per Schedule A,	$		
	(b) Bonds, per Schedule D,			
	(c) Stocks, per Schedule D,			
40.				
41.	Total income,			$
	Amount carried forward,			$

(a) Including commuted value of instalments or other benefits not payable at the time of death or maturity of endowments, such commuted value being entered also under No. 1 or 2 of Disbursements.

Form 9—Continued

Amount brought forward, ... $..........

III.—DISBURSEMENTS.

1. (A) For death claims (less $..........reinsurance), $..........; additions, $.......... $..........
2. (A) For matured endowments (less $..........reinsurance), $..........; additions, $.......... ....
3. Net amount paid for losses and matured endowments, ... $..........
4. For anunities involving life contingencies, ...
5. Premium notes and liens voided by lapse, less $..........restorations, ...
6. Surrender values paid in cash or applied in liquidation of loans or notes, ...
7. Surrender values applied to pay new premiums (see Income No. 6), $.......... to pay renewal premiums (see Income No. 15), $.........., ...
8. Surrender values applied to purchase paid-up insurance and annuities (see Income No. 9), ...
9. Dividends paid to policyholders in cash or applied in liquidation of loans or notes.......... ....
10. Dividends applied to pay renewal premiums (see Income No. 14), ...
11. Dividends applied to purchase paid-up additions and annuities (see Income No. 8), ...
12. Dividends left with the company to accumulate at interest (see Income No. 20), ...
13. (Total paid policyholders, $..........), ...
14. Expense of investigation and settlement of policy claims including $..........for legal expense, ...
15. Paid for claims on supplementary contracts not involving life contingencies, ...
16. Dividends held on deposit surrendered during the year, $.........., with interest thereon, $.........., ...
17. Paid stockholders for interest or dividends, ...
18. Commissions to agents (less commission on reinsurance): first year's premiums, $..........renewal premiums, $.......... annuities (original), $..........(renewal), $.........., ...
19. Commuted renewal commissions, ...
20. Salaries and allowances for agencies, including managers, agents and clerks, ...
21. Agency supervision, traveling, and all other agency expenses, ...
22. Medical examiners' fees, $..........; inspection of risks, $.........., ...
23. Salaries and all other compensation of officers, directors, trustees and home office employees, ...

24. Rent, including $.................for company's occupancy of its own buildings, less $.................received under sublease, ...
25. Advertising, $..........; printing and stationery, $..........; postage, telegraph, telephone and express, $..........; exchange, $.........., ...
26. Legal expense not included in item 14, ...
27. Furniture, fixtures and safes, ...
28. Repairs and expenses (other than taxes), on real estate, ...
29. Taxes on real estate, ...
30. State taxes on premiums, ...
31. Insurance department licenses and fees, ...
32. All other licenses, fees and taxes (give items and amounts):
33. ....
34. ....
35. ....
36. Other disbursements (give items and amounts:)
37. ....
38. ....
39. ....
40. ....
41. ....
42. ....
43. Agents balances charged off, ...
44. Gross loss on sale or maturity of ledger assets, viz.:
(a) Real estate, per Schedule A, ... $..........
(b) Bonds, per Schedule D, ...
(c) Stocks, per Schedule D, ...
45. Gross decrease by adjustment in book value of ledger assets, viz.:
(a) Real estate, per Schedule A, ... $..........
(b) Bonds, per Schedule D, ...
(c) Stocks, per Schedule D, ...
46. Total Disbursements, ... $..........
47. Balance, ... $..........

(A) Including commuted value of supplementary contracts—see No. 19 of Income.

FORM 9—Continued

IV.—LEDGER ASSETS.

1.	Book value of Real Estate, per Schedule A,	$	
2.	Mortgage loans on Real Estate, per Schedule B, first liens, $; other than first liens, $,		
3.	Loans secured by pledge of Bonds, Stocks or other collateral, per Schedule C,		
4.	Loans made to policyholders on this company's policies assigned as collateral,		
5.	Premium Notes on policies in force, of which $ is for first year's premiums,		
6.	Book value of Bonds, $; and Stocks, $, per Schedule D,		
7.	Cash in company's office,		
8.	Deposited in trust companies and banks not on interest,		
9.	Deposited in trust companies and banks on interest,		
10.	Bills receivable, $; agents' balances (debit, $; credit, $); net, $		
11.			
12.	Total Ledger Assets, as per balance on page 3,		$

NON-LEDGER ASSETS.

13.	Interest due, $ and accrued, $ on Mortgages, per Schedule B,	$	
14.	Interest due, $ and accrued, $ on Bonds, per Schedule D, Part 1,		
15.	Interest due, $ and accrued, $ on Collateral Loans, per Schedule C, Part 1,		
16.	Interest due, $ and accrued, $ on Premium Notes, Policy Loans or Liens,		
17.	Interest due, $ and accrued, $ on other Assets,		
18.	Rents due, $ and accrued, $ on company's property or lease,		
19.	Total interest and rents due and accrued,		
20.	Market value of Real Estate over book value, per Schedule A,		
21.	Market value (not including interest in item 14), of Bonds and Stocks over book value, per Schedule D,		
22.	Due from other companies for losses or claims on policies of this company, reinsured,		

		(1) NEW BUSINESS	(2) RENEWALS	
23.	Gross premiums due and unreported on policies in force December 31, 1908,	$	$	
24.	Gross deferred premiums on policies in force December 31, 1908,			
25.	Totals,	$	$	
26.	Deduct loading,			
27.	Net amount of uncollected and deferred premiums,	$	$	$
28.	All other assets (give items and amounts),			
29.				
30.				
31.				
32.				
33.	Gross assets,			$

DEDUCT ASSETS NOT ADMITTED.

34.	Company's stock owned, $; loans on, $	$	
35.	Supplies, stationery, printed matter, $; furniture, fixtures and safes, $		
36.	Commuted commissions, $; agents' debit balances, $		
37.	Cash advanced to or in the hands of officers or agents,		
38.	Loans on personal security, endorsed or not, $; bills receivable, $		
39.	Premium notes and loans on policies and net premiums in item 27 in excess of the net value of their policies,		
40.	Book value of Ledger Assets over market value, viz.:		
41.			
42.			
43.	Admitted assets,		$

FORM 9—Continued

V.—LIABILITIES.

Net present value of all the outstanding policies in force on the 31st day of December, 1908, as computed by the...... on the following tables of mortality and rates of interest, viz.:			
1. Actuaries table at......per cent. on*......			
......			
......	$......		
Same for reversionary additions,......	......	$......	
2. American Experience table......per cent. on*......			
......			
......	$......		
Same for reversionary additions,......	......	......	
3. American Experience table......per cent. on*......			
......			
......	$......		
Same for reversionary additions,......	......	......	
4. Other tables and rates, viz.:*			
......	$......		
......	......		
......	......		
......	......		
......	......		
......	......		
Same for reversionary additions,......	......	......	
5. Net present value of annuities (including those in reduction of premiums). Give tables and rates of interest, viz.:			
......	$......		
......	......		
......	......		
......	......	......	
Total,......		$......	
6. Deduct net value of risks of this company reinsured in other solvent companies......		......	
		$......	
7. Reserve to provide for health and accident benefits in life policies......		......	
8. Net Reserve,......		......	$......
9. Present value of amounts not yet due on supplementary contracts not involving life contingencies computed by the,......		......	$......

FORM 9—Continued

10. Liability on policies cancelled and not included in "net reserve" upon which a surrender value may be demanded, ... $........
11. Claims for Death Losses due and unpaid .... $........
12. Claims for Death Losses in process of adjustment, or adjusted and not due, ...
13. Claims for Death Losses which have been reported and no proofs received ....
14. Claims for Matured Endowments due and unpaid, ...
15. Claims for Death Losses and other Policy Claims resisted by the Company ....
16. Due and unpaid on Annuity Claims involving life contingencies, ...
17. Total Policy Claims, ...
18. Due and unpaid on supplementary contracts not involving life contingencies, ...
19. Dividends left with the company to accumulate at interest, $........ and accrued interest thereon, $........
20. Premiums paid in advance, including surrender values so applied, ...
21. Unearned interest and rent paid in advance ....
22. Commissions due to agents on premium notes when paid, ...
23. Commissions to agents, due or accrued, ...
24. "Cost of Collection" on uncollected and deferred premiums, in excess of the loading thereon (new business, $........; renewals, $........), ...
25. Salaries, rents, office expenses, bills and accounts due or accrued ....
26. Medical Examiners' and legal fees due or accrued, ...
27. State, County and Municipal taxes due or accrued, ...
28. Advances by officers or others on account of expenses of organization or otherwise, ...
29. Borrowed money, $........; and interest thereon, $........, ...
30. Unpaid dividends to stockholders, ...
31. Dividends or other profits due policy holders, including those contingent on payment of outstanding and deferred premiums, ...
32. Dividends declared on or apportioned to annual dividend policies payable to policy holders during 1909, whether contingent upon the payment of renewal premiums or otherwise, ...
33. Dividends declared on or apportioned to deferred dividend policies payable to policyholders during 1909, ...
34. Amounts set apart, apportioned, provisionally ascertained, calculated, declared or held awaiting apportionment upon deferred dividend policies, not included in Item 33, ...
35. Reserve or surplus funds not otherwise included in liabilities (give items and amounts separately, and state for what purpose each of said funds is held) ....
36. ....
37. ....
38. ....
39. All other liabilities (give items and amounts), ...
40. ....
41. ....
42. ....
43. ....
44. Capital stock, ...
45. Unassigned funds (surplus) ....
46. Total liabilities, ... $........

*State definitely the dates of issue and class of policies covered by each basis of valuation.

FORM 9—Continued

not permit them to count in figuring their reserve. The result is the total admitted assets of the company.[1]

[1] No discussion of insurance accounting would be complete without an explanation of the way in which an agency is carried on. This is shown by a concrete example in the next chapter on "Fire Insurance Accounting."

CHAPTER VIII

FIRE INSURANCE ACCOUNTING

73. *Similarity of insurance corporations.*—The organization of fire insurance companies and miscellaneous insurance companies is similar to that of life insurance companies. The business is considered as being a cash business. The commodity sold by the fire insurance company is protection against loss by fire and the goods are delivered only when the fire occurs. The general ledger of the company does not show the face value of the policies outstanding nor the reserve which has been accumulated against the risks. The essential books here are again the cash book and the ledger. The form of the cash book is the same as before. The headings of the various accounts are different due to the difference in the character of the risk.

74. *Difference between fire and life insurance.*—The most important difference between the fire companies and the life companies concerns the distribution of premiums received between income and reserve. In fire insurance companies the entire premium for the full term of the policy, whether it run for three or five years, is paid in advance instead of at stated periods during the life of the policy, consequently the whole premium cannot be considered as income. Only that portion covering the number of expired months can be regarded as income, while the remainder must be held as a reserve to meet possible fire losses in the years which the policy still has to run.

Let us suppose, for instance, that a company receives during its first year $52,000 as premiums on one year policies. The company in making the calculation assumes that it has written the same amount of business every day in the year. This assumption, of course, is not in accordance with the true facts, but it is universally made. It follows that a policy written on the first day of January expires with the end of the calendar year when the books are closed. All the premium paid on that policy has, therefore, been earned. A policy which is taken out on June 30 has six months to run beyond the end of the calendar year, consequently only one-half of the premium has been earned. On the other hand, a policy issued on December 31 has one year less one day to run, so that only one day's premium can be considered as having been earned. The company takes an arithmetical average of the number of days during which all of the policies have been in force, which enables them to ascertain the income actually earned. This is done as follows:

$$\frac{1 + 365}{2} = 183 \text{ days, or the average period.}$$

In practice the company usually divides the $52,000 by two, since 183 days is approximately six months. This would give an income of $26,000 for the first year on one-year policies.

75. *Method of ascertaining profits.*—In ascertaining the profitableness of the company's business during the year the total fire losses paid or still due for the year would be deducted from the $26,000 which has been earned and the balance would represent the surplus or net earnings of the company.

Pursuing the illustration further we find in the case

of one year policies that during the second year the company will have earned the $26,000 reserve to cover the policies written during the first year which did not expire until various dates in the second year, and in addition will have received (assuming that the company's business did not increase or decline), $52,000 for business written during the second year. This latter sum must be pro-rated in the manner already explained. The company would, therefore, receive as income from its second year's business $26,000 for the unexpired business of the first year and $26,000 earned on business written during the second year, making a total of $52,000.

As regards two-year policies the principle of calculation would be the same. The first year's premiums in this case would be divided by four instead of by two. It would be figured that the average expired portion of all the policies written for two years would be 183 days or approximately six months. If, therefore, the amount of the premiums received from these policies was $100,000 the company would take credit for $25,000 earned during the first year and the resulting calculation would give the earnings properly belonging to the first year.

During the second year (assuming that no new business was written, or, if taken, was eliminated from the calculation), the company would take credit for premiums covering the full twelve months since all of the insurance in question would be in full force and operation throughout the entire year. This would mean that during the second year the company would count $50,000 of the original premiums received as having been earned. There would remain extending into the third year some risks whose average unexpired life would be

approximately six months; these would represent all policies which had been written after June 30 of the first year. The company at the end of the second calendar year would hold out the remaining $25,000 to cover the risk for which it still was liable upon these policies. This would be counted among the earnings of the third year.

76. *The reserve.*—Reserve laws vary in the different states. The Pennsylvania law provides that the reserve must not fall below 20 per cent of the premiums received on unexpired policies. As soon as it falls below this amount the company is insolvent and is wound up. The calculation of the reserve is entirely in the hands of the state insurance commissioner. Fire losses are all charged off in the year in which they occur, and not in the year in which they are paid.

To avoid insolvency which might be brought about by heavy losses it is customary for fire insurance companies to start business with a large surplus contributed by the stockholders. Each stockholder pays in—say $150—for each share of $100 par value. Excessive losses can be charged against the surplus, thus keeping the reserve intact.

Another important point in connection with fire insurance accounting is that the law will not permit the company to carry its furniture and fixtures as assets: they must be charged off as part of the expenses of the year in which they are purchased. This does not mean that they must be eliminated from the books, but that they are not to be considered as part of the admitted assets of the insurance company in ascertaining the reserve.

77. *Fire insurance illustration.*—To illustrate the method of keeping fire insurance accounts, we will

assume the following to be ledger balances of an Illinois fire insurance company:

TRIAL BALANCE JULY 1, 1909.

Losses adjusted and paid	$ 16,785.90	
Losses adjusted, not paid	5,210.85	
Premiums in hands of Agents	7,892.54	
Capital		$200,000.00
Surplus		100,000.00
Premiums		97,500.00
Interest		8,942.50
Commissions	26,847.25	
Taxes	1,510.83	
Salaries	7,428.10	
General Expenses	16,582.72	
Investments and Loans	290,150.69	
Office Furniture	2,495.10	
Stationery and Supplies (Inventory)	1,828.90	
Accounts Receivable	16,825.95	
Accounts Payable		3,180.75
Reserve for Losses adjusted		5,210.85
Organization Expenses	1,822.03	
Cash	19,453.24	
	$414,834.10	$414,834.10

The Policy Register shows:

	Policies Issued.	Premiums Received.
Expiring in one year	$1,300,000.00	$15,000.00
Expiring in two years	1,075,000.00	18,500.00
Expiring in three years	1,450,000.00	34,500.00
Expiring in five years	1,250,000.00	29,500.00
	$5,075,000.00	$97,500.00

The Illinois statute reads:

"In estimating profits, there shall be reserved therefrom a sum equal to the whole amount of unearned premiums on unexpired risks and policies. Any company may declare dividends not exceeding 10 per cent on its capital stock in any one year that shall have accumulated and be in possession of a fund, in addition to the amount of its capital stock—and of such dividend, and all actual outstanding liabilities, equal to one-half of the amount of all premiums or risks not terminated at the time of making such dividends." A year is defined to mean a calendar year.

78. *Calculation of the reserve.*—From the above we will calculate the reserve and see what amount, if any, is available for dividends, without impairing the surplus shown in the trial balance. In our problem we will ignore changes in relation to policies canceled or settled for under claims for losses, and draw up the various forms according to the report blank prescribed by law:—

I. CAPITAL STOCK:			
Amount of capital paid up in cash	$200,000.00		
Premium on stock sold......	100,000.00		$300,000.00
Balance Ledger Assets Dec. 31, Previous year.........			
II. INCOME:			
Gross premiums	$ 97,500.00		
Deduct Re-insurance, rebates and return premiums................			
Total Premiums		$97,500.00	
Interest		8,942.50	
Other Income		....	
Total Income			106,442.50
Sum Total			406,442.50
III. DISBURSEMENTS:			
Total Losses paid...........	16,785.90		
Less amount received from reinsurance, salvage	....		
Net Am't Losses Paid...		16,785.90	
Commissions		26,847.25	
Salaries		7,428.10	
Taxes		1,510.83	
Office Furniture		2,495.10	
Organization Expense		1,822.03	
General Expenses	16,582.72		
Inventory Stationery, etc. ...	1,828.90		
	18,411.62		
Less items unpaid...........	3,180.75	15,230.87	
Total Disbursements....			72,120.08
Balance			$334,322.42

IV. LEDGER ASSETS:

Investments and Loans......	$290,150.69	
Agents' Balances	7,892.54	
Accounts Receivable	16,825.95	
Cash	19,453.24	
Stationery and Supplies (Inventory)	1,828.90	
Non Ledger Assets......		336,151.32
Accrued items	....	
Market value assets on book value	....	....
Deduct Assets not Admitted.		
Furniture and Fixtures.....	1,828.90	
Agents' balances over three months due	....	
Notes unsecured	....	
Excess book value of assets market value	....	1,828.90
Total Admitted Assets..		$334,322.42

LIABILITIES.

Losses unpaid	$ 5,210.85	
Gross premiums upon all unexpired risks, running one year or less from date of policy $15,000.00. Unearned 50%	7,500.00	
Gross premiums upon all unexpired risks running more than one year from date of policy $82,500.00. Unearned pro-rata	69,175.00	
Accounts payable	3,180.75	
Total liabilities except capital.................		$ 85,066.60
Capital actually paid in..........................	$200,000.00	
Surplus over all liabilities	49,255.82	
Surplus to policy holders.....................		249,255.82
Total		$334,322.42

RECAPITULATION OF FIRE RISKS AND PREMIUMS.

Written Term. Year	Amount Covered.	Gross Premiums.	Fraction Unearned.	Amount Premiums Unearned.
1 year....................	$1,300,000	$15,000	$\frac{1}{2}$	$ 7,500.00
2 "	1,075,000	18,500	$\frac{3}{4}$	13,875.00
3 "	1,450,000	34,500	$\frac{5}{6}$	28,750.00
5 "	1,250,000	29,500	$\frac{9}{10}$	26,550.00

PROFIT AND LOSS STATEMENT.

INCOME.

Total as per income...................	$106,442.50	
Less reserve requirements	76,675.00	$29,767.50

LOSSES.

Disbursements as per statement........		$72,120.08
Losses unpaid		5,210.85
Accounts unpaid		3,180.75
Net loss	50,744.18	
	$80,511.68	$80,511.68

To arrive at the reserve it is necessary to group the risks according to term and duration. Of all business written for one year or less, at risk at the end of any year, 50 per cent is considered as being earned (on the assumption that a company doing a regular business has a number of policies having only one day to run as it has policies that have run but one day) and 50 per cent is considered as being unearned.

This system is carried out on two year business on the same equation of time, i. e., if written this year, at the end of the year the proportion earned would be as 6 months is to 24, or ¼ with ¾ reserved; and at the end of two years, as 18 months is to 24, with ¼ reserved.

79. *Agency accounting.*—The insurance business is essentially one of agencies. One person, firm or corporation may be agent for two or three companies. To illustrate, let us suppose that our firm acts as agent for insurance companies A and B, and its books on January 1, 1909, disclosed the following financial condition:

ASSETS.

Cash	$ 2,340.00	
Agents' Ledger, Company A...........	10,980.00	
Agents' Ledger, Company B...........	15,360.00	
Furniture and Fixtures................	1,000.00	$29,680.00

LIABILITIES.

Due to Company A...................	$ 5,890.00	
Due to Company B...................	7,437.00	
Partners Account	16,353.00	$29,680.00

We have, by treaty agreements with both Companies, A and B, bound ourselves to reinsure 80 per cent of all A's risks in Company B, and 80 per cent of all of B's risks in Company A. We are to receive from each company 35 per cent commission on the net business written each month, and to pay our agents 20 per cent commission on the same basis, thus leaving 15 per cent net for ourselves.

The agents of Company A report to us premiums during January of $12,000, and return premiums of $2,000.

The agents of Company B report to us premiums during January of $15,000, and return premiums of $2,750.

The expenses of our office during January amount to $2,000 and the partners' withdrawals amount to $1,000. We receive in cash from agents of Company A the sum of $11,000, and from the agents of Company B the sum of $12,500. We pay to our companies during January our indebtedness as on the first of the month.

From the above data we will make our cash book entries, recording the transactions set forth. In doing so, we will take into consideration reinsurances, commissions, and so forth. We will also prepare a statement of assets and liabilities after crediting the month's profits to the partners' account.

80. *Journal entries.*—Our journal entries are:

Agents Company A........................	12,000	
To Company A..........................		12,000
Premiums on new business.		
Agents Company B........................	15,000	
To Company B..........................		15,000
Premiums on new business.		

Company A	2,000	
To Agents Company A		2,000
Return premiums Company A paid by agents out of premium receipts.		
Company B	2,750	
To Agents Company B		2,750
Return premiums Company B paid by agents out of premium receipts.		
Company B	900	
To Company A		900
Being the excess of premiums on policies written by Company B and reinsured in Company A over the premiums on policies written by Company A and reinsured in Company B.		
Company A	3,815.00	
Company B	3,972.50	
To Agents Company A		2,000.00
" " " B		2,450.00
" " Commission		3,337.50
Adjustment for commissions to general agents and agents of companies.		

It would be well at this point to explain the above entry. As already stated the commission we receive is on our net business, which does not include the returned premiums. We have made an entry debiting Company B with $900, and crediting Company A with the same amount, therefore, in order to find the net business of Company A we must subtract from $12,000 gross premiums the $2,000 returned, and add to this result ($10,000) the $900 reinsurance premiums, making a total net business of $10,900. Thirty-five per cent of this amount gives us $3,815 as our commission.

The following are the figures for Company B:

Gross Premiums	$15,000.00	
Less Return Premiums	2,750.00	
Net Premiums of Agents	12,250.00	
Less Reinsurance premiums	900.00	$11.350.00
		35%
Our commission		3,972.50

It is an easy matter to calculate the commissions of the company's agents. They get 20 per cent of their net business. This net business is the gross premiums less the returns in all cases, so all that is necessary is to apply this percentage to the proper figures.

Our final journal entry will be:

Profit and Loss...............	$1,337.50	
To Partners		$1,337.50

We thus close the profit and loss account by crediting the gain to the partners' account.

81. *Cash book entries.*—The cash book entries require no explanation and are as follows:

CASH BOOK.—OUR OFFICE.

Balance .... Bal.			2,340		Company A	5,890			
Agents Co. A	11,000				Company B	7,437			
Agents Co. B	12,500	—	23,500		Expenses ..	2,000			
					Partners Withd'w'ls	1,000	—	16,327	
					Balance ...			9,573	—
			25,840	—				25,840	—
Bal'nce down			9,513						

Our final step is the composition of the Balance Sheet:

ASSETS.

Cash	$ 9,513.00	
Agents Company A....................	7,980.00	
Agents Company B....................	12,660.00	
Furniture and Fixtures.................	1,000.00	$31,153.00

LIABILITIES.

Due to Company A....................	$ 7,085.00	
Due to Company B....................	7,377.50	
Partners	16,690.50	$31,153.00

CHAPTER IX

BANK ACCOUNTING

82. *Simplicity of bank accounting.*—Bank accounting is one of the simplest forms of accounting. To account for sums of money deposited and paid out is certainly simpler than to record properly the varied transactions met with in railway, coal mining, or manufacturing concerns.

In railway accounting we must always have in mind the question as to whether an expenditure is properly chargeable to expense or to capital. In coal mining the comparison of figures is of great importance. They must be compared month with month, year with year, year-to-date with year-to-date, etc. In the manufacturing business, labor, strikes, fire insurance, etc., influence the accounting directly.

83. *Bank's stock in trade.*—The stock in trade of a bank consists of its capital (its deposits, or the loans made to it by its customers); and its loans and discounts, or the loans it makes to its customers and to others.

The capital of a bank is the sum contributed by the stockholders as a base or surety. It should be invested in interest-bearing securities of unquestionable value, in order to form an underlying reserve for use in case of serious need.

All deposits are made in cash or its equivalent. All loans or discounts are credited to customers' accounts and although the word "credits" is used, they may im-

mediately withdraw the proceeds in cash. All transactions are therefore dealings in cash.

84. *Essential features of bank accounting.*—The essential features of bank accounting are:

1. Daily statement.
2. Continuous balance in customer's deposit accounts.
3. Detection of errors in posting.
4. Prevention of defalcations.
5. Handling of large volume of business quickly and economically.

85. *Daily statement.*—The daily statement is really only a trial balance of the general ledger. All earning and expense accounts appear thereon though they are usually grouped so that they may be added together. The daily statement serves three very useful purposes of value in the order named: First, to determine whether or not the reserve is sufficient; second, to enable the officers to ascertain whether to make or curtail loans; third, to set before the officers the condition of the bank, i. e., whether its loans and investments are properly distributed, and whether the bank is making or losing money and how much.

86. *Continuous balance in deposit accounts.*—The continuous balance in customers' deposits accounts is one of the typical features of bank accounting. It is necessary for the bookkeeper to be able to turn to his ledger and tell instantly what a customer's balance is and whether it may be drawn against. Very frequently this information must be communicated to the teller in such a manner that it will not arouse the suspicion of the man at the window.

87. *Prevention of errors.*—The prevention of errors in posting is another very important feature of bank accounting. If a deposit of five hundred dollars made

by James Burke is credited to the account of James Burt, it is possible, if the latter account is one that needs watching, that checks of the latter may be paid against the deposit made by the former before the error is discovered. Again, a check of James Burt may be charged to the account of James Burke, and discovery made too late, that the account of James Burt is not good for the check. In large cities, where clearing houses are in operation, it is necessary to have stringent rules governing the return of "not good" checks sent through the exchanges; if the error in posting is discovered after the hour set for the return of such checks, the bank so paying in error must be the loser.

Several methods are in use to detect these errors in posting. The system generally used is to have the debits and credits written into debit and credit books, or "scratchers," as they are sometimes called, by the bookkeeper's assistants; and then to check the entries made in the ledgers with those made in the scratchers.

Another and more satisfactory method is to have a second posting made by the assistants on sheets and the entries on the sheets checked with those on the ledger. These sheets may be handed to the customer with the pass book when it is balanced. In general the best way to prevent errors in posting is to duplicate the work and compare results.

88. *Defalcations.*—The question of defalcations is one of the most serious in bank accounting. When the matter has been discussed at length the result is always the same—that some one must be trusted. Generally speaking, the larger the bank, the easier it is to throw safeguards around the work. For example, in a country bank one teller receives deposits and pays out the money. He usually has access to the ledger and to the

loan records. In a large city bank it is possible to divide the clerical staff into departments and put each department into a cage with a self-closing and locking door. With this arrangement, supplemented by a stringent rule that only the clerks be allowed within the cage, the bank has started a system for the prevention of defalcations.

The first general rule to be observed in the endeavor to prevent defalcations is to arrange the work so that a clerk who keeps records does not handle the money. For example, do not allow a bookkeeper to relieve a teller. Arrange the desks so that the discount clerk may send a borrower to the note teller's window to pay a note.

A large percentage of defalcations is made with the assistance of the individual bookkeeper. Several plans naturally suggest themselves to prevent successful collusion. One is to install an auditor's department. This department should receive all pass books left for balancing, write them up and return them to the depositors. Another plan is to keep the individual ledgers in duplicate and to check from one to the other at frequent intervals. Another plan is to shift the bookkeepers from one ledger to another without notice.

In addition to these arrangements it might be worth while to have independent audits made occasionally by experts.

89. *Economy in operation.*—Another distinguishing feature of bank accounting is the volume of business that must be handled in a given time. The clerks arrive at eight-thirty, except Monday, when the hour is eight. In one bank with which the writer is familiar, from 2,500 to 3,500 letters are received, opened, and the items enclosed for credit prepared for and sent to the clearing

house before ten o'clock. Not only is this done, but the mass of miscellaneous matter contained in the mail is sorted, distributed and the daily work connected therewith begun before ten o'clock. This same bank receives from eight to fifteen thousand checks from the clearing house in exchange for those sent, by ten-thirty, which must be proved, sorted, posted, signatures compared, booked back for stop payments, irregularities in filling, dates, endorsements, etc., etc., and the bad checks returned to the sending bank before three o'clock.

The day's work must be proved before the clerks go home, no matter what the hour. In other lines of business, the work which is not done one day may hold over till the next.

This rush of work must be accomplished with a minimum amount of expense. The arrangement of departments and distribution of the work must be such as will keep the clerks busy at all hours of the day on work to which they are adapted.

90. *Origin or source of entries.*—The majority of the entries passing through the books of a bank originate from the following sources: the deposit slip or the remittance letter, the check or draft, the note as a discount or loan, the cashier's check. Others of lesser importance in a study of the general scheme of accounting will be mentioned later.

91. *The deposit slip.*—The deposit slip shown in Form 10 and its companion, the remittance letter, shown in Form 11, show the kinds of items that are likely to be found on these forms. The deposit slip is always used when a deposit is made over the counter and the letter when a remittance is received by mail from a bank correspondent. (See Forms 10 and 11 on pages 113–114.)

DEPOSITED BY

F. J. HERMAN & CO.

in the

CHASE NATIONAL BANK

OF NEW YORK

New York, N. Y., August 31, 1910.

	Dollars	Cents
Bills	400	00
Gold	120	00
Silver	30	00
Checks (enter singly) 1st Nat.	130	00
Selves	82	50
Kountze	37	25
1st N. Dover, Pa	180	00
Cashier's Check	50	75
	1,030	50
Less exchange on Dover		20
	$1,030	30

FORM 10—Deposit Slip

BANK OF CONEY ISLAND

CONEY ISLAND, N. Y.

August 31*st*, 1910.

CHASE NATIONAL BANK,

New York City.

We enclose herewith for credit and advice,

Yours truly,

H. M. JEFFERSON,
Cashier.

DO NOT PROTEST NEW YORK CITY ITEMS,
COUNTRY ITEMS, UNDER $10,
OR ITEMS MARKED X.

PAYER	WHERE PAYABLE	AMOUNT			REMARKS
42	N. Y.		187	50	
96			98	30	
54			131	50	
33			100	00	
Brown Bros.			80	00	
21			75	25	
23			87	26	
62		1,	000	00	
75			500	00	
J. P. Morgan & Co.			37	50	
1			82	00	
3			83	00	
12			127	32	
1st Nat.	Boston, Mass.		200	00	
2nd Nat.	"		500	00	
		3,	289	63	

FORM 11—Remittance Letter

The deposit slip shows a list of the different items that may be deposited over the window including bills, gold, silver, exchange, checks on selves, route or hand items, checks on other cities or foreign checks as they are called, and cashier's checks. The gold, silver and bills are charged by the receiving teller to cash, the custodian of which is the paying teller. The usual expression is that he charges the paying teller. The route, or hand items, which are to be collected by the messengers sent out by the note teller are charged by the receiving teller to the note teller. The foreign checks are charged to the collection clerk. The exchanges, checks on selves and cashier's checks are each represented by accounts on the general ledger and may be charged by the receiving teller to these accounts. Exchanges are usually charged to the paying teller.

The receiving teller sets up one entry at the close of the day somewhat as follows:

Cash	$550.00	
Exchanges	130.00	
Individual Deposits	82.50	
Cashier's Checks	50.75	
Note Teller	37.25	
Collection Ledger	180.00	
to		
Individual Deposits		$1,030.30
Exchange		.20

It is the universal practice to post the credit to the customer's account in the individual ledger from the deposit slip or letter.

92. *The customer's check.*—The customer's check shown in Form 12 is the source of the majority of debits against customers' accounts. The bank draft shown in

Suffield, Conn., ______________ 19____ *No.*______

THE NATIONAL BANK OF NORWALK

Pay to the order of ______________________________ $__________

____ *Dollars*

____

FORM 12—Customer's Check

AMERICAN NATIONAL BANK

HAYFIELD, MINN., ______________ 191____ No.

PAY TO THE ORDER OF ______________________________ $__________

____ DOLLARS

TO FINE ART NATIONAL BANK,
CHICAGO, ILL.

____
Cashier.

FORM 13—Bank Draft

Form 13 is virtually a customer's check on another bank and is included in the same category as a customer's check. (See Forms 12 and 13 on page 116.)

The check debit against a customer's account arises in one of five ways:

1. By payment in cash over the counter.
2. By payment in cash through the exchanges.
3. By credit to another customer's account over the window.
4. By certification.
5. By journal credit in settlement of some other obligation.

These are well understood, except payment by certification and by journal credit in settlement of some other obligation.

When a check is presented for certification, the bank charges the account of the customer and credits certified check account. The check, which before certification was simply an order directing the bank to pay some one a certain sum of money, has been changed in form. After certification it is, in effect, no longer an obligation of the maker, but of the bank. As far as the accounting with the customer is concerned, the check has been paid, though the voucher may not be in the possession of the bank.

The chief source of journal credits to offset checks paid is in note teller's department. A customer presents his own check to the order of the bank in payment of a note or draft. Naturally, the account of the customer will be charged, the check received being used as a voucher, and the proper account credited.

If the check is in payment of a note discounted by the bank the credit will be to bills discounted. If in

payment of a note left for collection, the credit will be to some other customer's account.

98. *The note as a discount or loan.*—There are three kinds of notes that pass through the books of a bank daily. The first and most important is the note which is discounted for a customer; the second is the loan made to a customer on which the interest is paid at maturity or at frequent intervals instead of being deducted from the face of the note; the third is the note left by the customer for collection.

The note left for collection only, does not enter the accounting until it has been paid and then the note is not the source of the entry but the proceeds of it, or cash. This cash is handled like any other new deposit except that the entry originates in the note teller's department instead of in the receiving teller's, and is in the form of a journal entry charging cash and crediting the customer, instead of a deposit slip.

The note representing a loan on which the interest is paid at maturity or at intervals is usually a time or demand loan secured by collateral of some sort. The following entries are the only ones necessary unless the loan is decreased or increased, in which case they are of the same form.

When a demand or time loan is made the entry is,—

Demand Loans or Time Loans	$10,000.00	
to Individual Deposits		$10,000.00

for the full amount of the loan.

When the loan is paid in full at maturity with interest the entry is,—

Cash
or
Individual Deposits } $10,000.00
to
Demand Loans
or
Time Loans } $10,000.00
Interest
100.00

These entries are prepared by the loan clerk.

Notes discounted by a bank are divided into two classes: First, notes discounted by the bank for its own customers, always called "bills discounted"; and notes purchased by the bank from brokers, always known as "bills purchased."

When a bank discounts a note for one of its customers it really buys the note for a little less than the face value. Looking at the transaction in this light, the bank takes its profit at the beginning of the transaction instead of at the end when it resells the note. The entries are as follows:

Bills Discounted
$500.00
to
Individual Deposits $495.00
Discount 5.00
For sixty day note discounted at six per cent.

Individual Deposits
or
Cash } $500.00
to
Bills Discounted $500.00
For note paid this day.

94. *Cashier's check.*—The cashier's check is another source of entry. It is a check on the bank itself. It is an order from the cashier directing the paying teller to pay a definite sum to the order of the party named. A sample is shown in Form 14, page 121.

Cashier's checks are drawn for various purposes and the entry made when the check is issued depends upon the purpose of the expenditure. "Cashier's checks" is always the credit account. If the check represents the proceeds of a loan to an outsider the charge is to "loans." If it is in payment of a bill for bonds bought, the charge is to "bonds owned" and so on for such items as "bond and mortgage," "bills purchased," "expense," etc., etc.

These checks are ultimately paid through the exchanges by credit to some other customer's account, or cashed over the paying teller's counter.

When paid, the charge is always to "cashier's checks." The credit is usually to "cash," though it may be to "individual deposits."

95. *The certified check.*—Another source of journal entry is the certified check. A certified check is a check of a depositor, drawn to the order of some person, upon the face of which the bank has certified its genuineness and value, after having charged it to the account of the depositor.

Checks are certified for one of two reasons. Either, the obligor wishes to assure the obligee that he has funds on deposit to meet his check, or the obligee prefers the promise of the bank to the promise of the obligor.

The entries are as follows:

When the check is certified:

Individual deposits
to
Certified checks

Newark ______________________ 19___ No. __________

THE NATIONAL CITY BANK OF NEWARK

Pay to the order of ____

____ Dollars

$ __________ ______________________________

Cashier.

Form 14—Cashier's Check

When the check is paid:

Certified checks
to
Cash
or
Individual deposits.

When a check is certified it has the same standing in the liabilities of the bank as a cashier's check.

96. *Other entries.*—The items already referred to are the sources of nearly all entries to be met with in bank accounting. The others are neither numerous nor hard to understand. One of the entries most frequently met is the charge made to a customer's account for a check deposited by him, subsequently returned "not good." The charge is to "individual deposits" and the credit is to "cash." Another entry is the one made necessary when payment of interest is made on demand loans, time loans, bonds, mortgages, etc. The entry is "cash" or "individual deposits" to "interest received."

CHAPTER X

BANK ACCOUNTING (*Continued*)

97. *The general ledger.*—The general ledger, as in other businesses, is the record of the entire business. It must be posted and proved daily. The accounts to be found on the general ledger of a bank are as follows:

ASSETS	LIABILITIES
Bills discounted.	Capital.
Demand loans.	Surplus.
Time loans.	Undivided profits.
Bonds.	Individual deposits.
Bonds and mortgages.	Due to banks.
Cash.	Certificates of deposit.
Due from banks.	Certified checks.
Expense.	Cashier's checks.
Interest paid.	Discount.
Exchange paid.	Interest received.
	Exchange received.

The daily entries to the above accounts are the summaries of the numerous entries already referred to. For example, the account "individual deposits" is credited with the total of the deposits received over the receiving teller's counter and with the total proceeds of all discounts, loans and collections. The account is charged with the total of all checks paid over the paying teller's counter, with the total of all checks on the bank deposited over the receiving teller's counter, with the total of all customers' checks received by the note teller, the discount clerk, the loan clerk, etc., and with all charges

against customers for exchange, checks returned not good, notary fees, etc.[1]

98. *The general journal.*—The general journal is the chronological record of all charges and credits and the posting medium to the general ledger. Naturally, its entries are summaries of the day's work in the different departments. A form of journal and cash book combined is shown in Form 15, page 125.

A serious objection to this journal is that the general bookkeeper must copy the figures prepared by the tellers and clerks in making up his entries. This takes time, magnifies the chance of error and wastes stationery. These objections may be overcome by an adaptation of the loose leaf principle.

Instead of the bound journal, have journal sheets printed similar to Form 16 on page 126. These sheets are like the journal page previously shown except that the original entry is prepared by the teller or clerk who compiles the figures. The sheets from each department or subdivision of department should be designated by a letter and each set of sheets so lettered should be differently colored. The color scheme assists in sorting and saves time in looking up old entries.

These sheets should be inspected by the individual bookkeeper and all entries which affect his records posted and initialed by him.

After having been posted to the individual ledger, the sheets should be sent to the general bookkeeper and proper postings made by him to the general ledger. Only the totals of the "cash" and "individual deposits" columns need be posted on the general ledger, but each

[1] The forms of general ledger in use are fully illustrated in the volume on banking practice.

DR. *September 30th*, 1910 CR.

Individual Ledger	Cash	General Ledger	Posted	Account	Posted	General Ledger	Cash	Individual Ledger
		15,500 00		Demand Loans				
				Henry Brush				10,000 00
				John Haines				5,500 00
				For loans made				
3,825 32				H. A. Ames				
				Demand Loans		3,800 00		
				Interest		25 32		
				For loan paid				
	10,000 00			Cash				
		180,000 00		Exchanges				
7,200 00				Individual Deposits				
		13,000 00		Cashier's Checks				
				to				
				Individual Deposits				210,200 00
				For deposits made this day				
11,025 32	10,000 00	208,500 00		A. K. Ames		3,825 32		225,700 00

FORM 15—General Journal

Dr.				September 30th, 1910				Cr.
Individual Ledger	Cash	General Ledger	Posted	Account	Posted	General Ledger	Cash	Individual Ledger
	10,000 00		√	Cash				
		180,000 00	√	Exchanges				
7,200 00			√	Individual Deposits				
		15,000 00	√	Cashier's Checks				
				to				
				Individual Deposits				210,200 00
				For deposits made this day				
130,250 00			√	Individual Deposits				
		786 32	√	Exchanges				
		500 00	√	Cashier's Checks				
				to				
				Cash			131,536 32	
				For checks cashed this day				
		127 30	√	Expense				
				to				
				Cashier's Checks				
				Edison Elec. Ill. Co.		35 30		
				New York Telephone Co.		42 00		
				Stewart, Warren & Co.		50 00		
				For bills paid this day				
137,450 00	10,000 00	194,413 62				127 30	131,536 32	210,200 00

Form 16—General Journal Sheet

entry in the "general ledger" column must be properly entered on the general ledger.

After all postings are made to the general ledger, the sheets should be sorted according to letters and then bound with two or three eyelets in such a way that no ticket can be subsequently removed or another ticket added without mutilating the day's tickets. The day's tickets should then be fastened in a suitable binder for ready reference in case of need. When the binder is full the oldest tickets should be removed, filed in card-board boxes and properly labeled.

The advantages are that the entries are prepared by the clerks who originate the figures, that each debit shows the credit made, thus giving the clerks a clearer idea of the accounting, that an officer or other responsible clerk may examine the entire journal of each day without disturbing the general bookkeeper.

99. *Discount register.*—The discount register is a chronological record of the notes discounted, showing the date of discount, the number given to the note, the maker, the endorsers, the time and due date, the amount of the note, the amount of the discount and the proceeds.

If the bookkeepers are allowed to post from the discount register, which is not the best practice, the only entry required is the one for the general ledger showing the totals for the day. This entry charges "bills discounted" with the full amount of the notes, and credits "discount" with the discount and "individual deposits" with the proceeds.

If the postings to the individual ledger are made from tickets instead of from the register, the detail of individual credits must be shown.

100. *Discount tickler.*—The discount tickler is sometimes a book of original entry. It is a record of the

notes held by the bank under discount, arranged by maturities. It serves to call the attention of the discount clerk to the notes which mature each day so they may be presented for payment.

The journal entry prepared from the tickler is the reverse of the entry prepared from the discount register. It charges "individual deposits" or "cash" and credits "bills discounted" with the total of the notes maturing each day.

101. *Collection register.*—The collection register is simply a chronological record of the items taken for collection. It is superseded by more modern records in banks which have a large volume of this business.[1]

102. *Certified check register.*—The certified check register is the record of checks certified each day. The total of the checks certified is charged to "individual deposits" and credited to "certified checks."

103. *Cashier's check book.*—The cashier's check book is, like any other check book, the record of checks issued. The charges are properly distributed in the entry and "cashier's checks," credited.

104. *Difference between bank and trust company accounting.*—The fundamental differences between the accounting of a bank and a trust company are best shown in a comparison of the trial balances of the general ledgers of the two kinds of institutions. Such a comparison is presented in Form 17 (pages 129–130), in which is exhibited the names of the accounts required in a national bank, a state bank and a trust company.

On referring to the form we find that all three institutions have accounts representing demand and time loans. The account representing bills discounted

[1] See Volume VI, Banking Practice and Foreign Exchange, for more complete discussion of this subject.

ASSETS.

Trust Company.	*State Bank.*	*National Bank.*
Demand loans.	Demand loans.	Demand loans
Time loans.	Time loans.	Time loans.
	Discounts.	Discounts.
Bills purchased.		
Rents receivable.	State bonds.	U. S. bonds to secure circulation.
	Other bonds.	U. S. bonds to secure U. S. deposits.
		U. S. bonds on hand.
		Other bonds.
State bonds.	Mortgages owned.	
Other bonds.	Banking house and lot.	
Stocks.	Other real estate.	Banking house and lot.
Mortgages owned.	Furniture and fixtures.	
Banking house and lot.	Due from approved reserve agents.	
Other real estate.	Due from other banks, bankers and trust companies.	
Furniture and fixtures.		Furniture and fixtures.
Due from approved reserve agents.	Cash.	Due from approved reserve agents.
Due from other banks, bankers and trust companies.		Due from other banks, bankers and trust companies.
Cash.		Cash.
Expense account.	Expense account.	Redemption fund with U. S. Treasurer.
Taxes.	Taxes.	Expense account.
Rent (if building not owned).	Rent (if building not owned).	Taxes.
Salary (if desired).	Salary (if desired).	Rent (if building not owned).
Interest paid.	Interest paid.	Salary (if desired).
Exchange paid.	Exchange paid.	Interest paid.
		Exchange paid.

Form 17. Comparison Trial Balance.

LIABILITIES.

Trust Company.	*State Bank.*	*National Bank.*
Capital.	Capital.	Capital.
Surplus.	Surplus.	Surplus.
Undivided profits and (or) Profit and loss.	Undivided profits and (or) Profit and loss.	Undivided profits and (or) Profit and loss.
		National bank notes outstanding.
Due to banks, bankers, and trust companies.	Due to banks, bankers, and trust companies.	Due to banks, bankers, and trust companies.
Individual deposits.	Individual deposits.	Individual deposits.
Court and trust funds.		
Demand certificates of deposit.	Demand certificates of deposit.	Demand certificates of deposit.
Time certificates of deposit.	Time certificates of deposit.	Time certificates of deposit.
Certified checks.	Certified checks.	Certified checks.
Cashier's checks.	Cashier's checks.	Cashier's checks.
State deposits.	State deposits.	United States deposits.
Dividends.	Dividends.	Dividends.
Interest received on loans.	Interest received on loans.	Interest received on loans.
Interest received on bonds.	Interest received on bonds.	Interest received on bonds.
Dividends received on stocks.		
Interest received on mortgages.	Interest received on mortgages.	
Commissions.		
	Discount received.	Discount received.
Exchange received.	Exchange received.	Exchange received.

appears in both the banks, but not in the trust company's list. Closely akin to bills discounted, however, appears "bills purchased." While trust companies are not usually allowed to discount notes, they are allowed to buy, among other things, bills of exchange, notes or other evidences of debt. They, therefore, buy the notes instead of discounting them.

Trust companies are allowed to buy stocks, while banks are not. National banks are not allowed to loan on the security of real estate, while state banks and trust companies have this privilege.

One of the chief differences between a trust company and a bank is the business represented by the liability account, "court and trust funds." The special field of the trust company, the reason for its creation, lies in the business that makes it necessary to have this account.

In setting up an accounting system to care for trust funds that must be accounted for to the courts, one must always remember that frequent calls are made for statements. It is well to have as complete information as possible on the record itself.

In accounting for the funds left in trust or under a will, the transactions that affect the *corpus* or body of the estate must always be kept entirely separate from the transactions affecting income.

A trust company receives commissions for various services performed but it has no discount account.

105. *Trial balance of savings bank.*—The trial balance of a savings bank ledger was purposely omitted from the comparison shown in Form 17, because it has so few points in common with either of the three institutions. The trial balance shows the following accounts:

RESOURCES

Bonds and mortgages.
Bond investments.
Banking house and lot.
Other real estate.
Cash on hand.
Cash on deposit in banks and trust companies.
Interest accrued on bonds and mortgages.
Interest accrued on bank balances.
Interest accrued on bond investments.
Rents accrued.
Interest to depositors.
Salaries.
Taxes, repairs, and insurance on banking house.
Taxes, repairs, and insurance on other real estate.
Printing, stationery, advertising, etc.
Light and heat.
Other expenses.
Tax on surplus.

LIABILITIES

Due depositors.
Interest accrued to depositors.
Surplus.
Interest on bonds and mortgages.
Interest on bonds.
Interest on bank balances.
Rents.

106. *Audits.*—Only the general features of the method of making an audit of a bank can be presented in this general survey of bank accounting. The reason and authority for the examination determines very largely what the process shall be.

The cash should be proved first in any case, then the

loans, discounts bonds owned, bonds and mortgages and other assets such as real estate owned.

If the staff arrives at the bank before the vault is opened it is possible to make an absolute proof of each of the above items. The collaterals to loans should be reconciled by communicating with the borrower. If the bank has reserve deposits with other banks in the same city, the pass book should be written up and verified. If the reserve deposits are in other cities, such memoranda should be made as will make it possible to reconcile the account later. The amounts due from collecting banks should be verified.

The most important item among the liabilities is the deposits. Accounts with banks may be verified by mailing a statement and requesting reply. Accounts with individuals are not so easily verified. A very good test may be made by writing up all the pass books presented while the staff is at the bank and securing verification from the depositor. Several large accounts may be selected and the pass books called in.

The individual ledgers should be footed and proved with the balance appearing on the report to be made.

Earnings and charges for the period under examination should be analyzed.

Certified checks, cashier's checks, certificates of deposit and capital stock may be verified quickly and easily.

The balance sheet of the bank will show surplus on book value. New surplus should be compiled, carrying all assets at market value and allowing for interest accrued receivable and payable not entered on the books. Deduction should be made for overdrafts which are of bad or doubtful character and for loans upon which there may be some loss. Discount and other earnings paid

in advance should be rebated to the date of examination.

The text of the report should comment on the balance sheet, explain all losses and comment on all unusual gains. Methods of accounting should be criticized and suggestions offered. It should set forth the facts as they should be presented to the board.

CHAPTER XI Omit!

BREWERY ACCOUNTING an Anachronism

107. *Peculiar conditions of the business.*—The system of brewery accounting we will consider is that adapted to a business conducted in or near New York City, where the conditions are peculiar, as the brewers besides manufacturing and selling beer must advance large sums of money to their customers.

These advances may be made to assist in paying the heavy liquor tax, or for the payment of the various articles of equipment needed by the saloon keeper. They are secured by chattel mortgages, chattel receipts, or notes, and form a very large item in the assets of a brewery.

The brewer pays a federal tax of $100 per annum and has to furnish a bond of indemnity, the amount of which is determined by the output of the brewery. He also pays an internal revenue tax of one dollar per barrel on all malt liquors sold. The government controls this tax by requiring that he keep a daily record of the quantity of beer brewed and the quantity sold, as well as the name and quantity of material purchased. The records are kept in books prescribed by the government, and from them a monthly report is made in duplicate. The record books and reports must be signed by a principal of the firm, or by an officer of the corporation, to certify as to their correctness. A deputy internal revenue collector calls monthly at each brewery in his district, signs the record books, and takes the reports

with him. One copy is retained in the office of the collector while the other is forwarded to Washington. In a similar manner an annual report is prepared the first of each July. While these records are not a part of the accounting system of a brewery, the information contained in them is obtained from the regular books of accounts, and the figures must agree. These in brief are the conditions to be met, and the following system of accounts, if carefully followed, will prove practical as well as efficient.

108. *Contract record (Form 18)*.—The raw materials used in the manufacture of lager beer—malt, cornmeal, or rice and hops—are usually contracted for in large quantities in the fall of the year after the crops have been harvested and prices established. To properly control accounts, a contract record must be kept either in a bound book, by the loose leaf method, or on cards properly ruled. It should consist of two main divisions, one of which will show the liability on the contract, and the other how this liability is reduced by the receipt of goods contracted for, thereby creating in its stead a new liability—accounts payable—which must be taken care of in the books of account. (See Form 18 on page 137.)

If the contract be made in triplicate, one copy is retained by the seller, and two are held by the purchaser, one of which is made the first division of the contract record, while the other is retained in the purchasing department as a record for comparison with the invoices when received.

109. *Goods received memo*.—When the goods have been shipped, the accompanying bill is retained in the purchasing department until arrival of the goods. All material received should be weighed, and the weights

Contract							Goods Received									
Date	Seller	Material	Quantity	Unit	Price	Terms, Etc.	Date		Car No.	Bags or Bales	Quantity	Unit	Bal.	Inv. No.	Remarks
							Inv.	Goods Rec'd							

FORM 18—Contract Record

entered on a "goods received memo" by a receiving clerk who does not have charge of the bills, in order to place upon him the full responsibility for the accuracy of his work. He has to determine the quantity of goods received by him, regardless of what may appear on the bill. This prevents carelessness which might arise in checking another's figures, and the neglect either to properly weigh or count the goods received. He signs this memo, vouches for the weight or quantity, and enters the weights or quantities on a "stock card."

110. *Stock card.*—For these, heavy manila cards may be used. They should be hung convenient to the place where the material they cover is stored, so that each addition to or subtraction from the stock on hand can be readily recorded. A card is made out for each item—as malt, hops, meal, coal, etc. At the end of the month, the stock cards are turned into the office and compared with the stock book, footings are made and verified, the balance is carried down, and a new card showing this balance returned to the store-room.

The "goods received memo" then passes to the purchase department where is still held the bill for the goods. Prices, terms and quantities are compared to see that they agree with the order as issued; the bill is then O. K.'d, attached to the "goods received memo" and turned over to the bookkeeper. He in turn checks extensions and footings, makes any deductions revealed by the "goods received memo," and makes his entries in the "invoice book" or "purchase journal," and also in the "contract record." This completes and preserves the record of the receipt of the goods, records the liability incurred and cancels that portion of the contract. The bill is then filed and ready for payment.

For all materials or goods purchased not subject to

contract, the method is similar: upon receipt of the goods an entry is at once made on the "stock card," the triplicate order is O. K.'d by the receiving clerk and is passed to the purchase department where it is attached to the invoice and sent to the bookkeeper. As material in charge of the receiving clerk is needed by the various departments, he delivers it upon requisition, and enters the facts on the "stock cards."

111. *Stock book.*—A very valuable record, in which all the data on the stock cards may be collated and made available as a going inventory, is the "stock book." In the "materials purchased" section of this book is shown material on hand at the beginning of the month and material received during the month. The entries for material received are made from the invoices, and at the end of the month are compared with the entries on the stock cards made by the receiving clerk from his "goods received memo."

In the "materials used" section is shown the materials used during the month. This information is obtained from the daily reports of the brewmaster (Form 19), and must agree with the stock cards on which the entries have been made daily by the workman in charge as the material was required for brewing. The balance on each stock card must agree with the respective column of the "stock book." (See Form 19 on page 140.)

In the third section is shown the beer on hand at the beginning of the month, and the beer brewed during the month, the brewings being obtained from the daily reports of the brewmaster.

In the fourth section are the sales as shown by the sales book summary at the end of each week. The beer on hand at the beginning of the month, plus the beer brewed, less the sales and beer consumed on the prem-

No.

Date		Hops	Malt	Meal	Brewed
		Pounds	Bushels	Bags	Barrels

....
Brewmaster

Form 19—Brewing Report

ises (of which the brewery bartender keeps record) will show the balance of beer which should be in the cellar and must be verified by physical inventory at the end of the month.

112. *Invoice book or purchase journal (Form 20)*.—Reference has been made to the invoice book, through which all bills are passed. A form of book which has been found to give entire satisfaction for this purpose, where all or nearly all bills are paid within a month, is as follows: The book is divided into two parts, debit and credit, and serves the twofold purpose of accounts payable ledger and of purchase journal. All invoices are numbered consecutively, and are entered on the credit side in the accounts payable column. The amount is carried to its particular distribution column, and its total is charged to that particular merchandise or expense account at the end of the month. (See page 142.)

When invoices are paid, they are posted to the debit side of the book by number. Another column headed "credit to account" is used on the debit side for the purpose of transferring to the ledger any bill which is not to be paid within a month or two at the latest, and to provide for any deductions which are made on a bill subsequent to its entry on the credit side of the invoice book. The difference between the debit and credit side shows the item of accounts payable, and must agree with the balance of accounts payable controlling account in the general ledger, and is verified by preparing a schedule of bills remaining unpaid.

As before stated, this form of invoice book will give excellent results where bills are paid in thirty or sixty days, but if invoices remain unpaid for a longer period it will be found advisable to omit the debit side of the invoice book, to install a purchase or creditors' ledger,

DR.

Date	No.	Particulars	Fol.	Cr. to Account	Invoices Paid	Date of Invoice	No.	Names	Explanation	Amount	Accounts Payable

FORM 20—Invoice or Purchase Book

CR.

Malt		Meal		Coal		Mach. and Tools	Casks, Vats and Bbls.	General Expense	Other Accounts	S'dry Debtors Ledger	General Ledger
Bu.	Amount	Bags	Amount	Tons	Amount						

FORM 20—Continued

opening accounts with all creditors, and posting all invoices to the credit of the respective ledger accounts. Payments are then posted from the cash book to the ledger accounts, and a trial balance is drawn off at the end of each month, which must agree with the balance of accounts payable controlling account in the general ledger.

118. *Delivery and shipping.*—The shipping clerk must be careful of his stamp account, and must see that no package for a customer leaves the brewery unstamped. For this purpose his day sheet—Form 21—is divided into a record for stamps, a record for beer, and a record for the register, and all three records must agree. (See Form 21 on page 144.)

Beer stamps are purchased in large quantities, and are kept in the main safe or vault by the bookkeeper or cashier, who is responsible for them, and must prove them with his government record. When the shipping clerk requires stamps, he draws them, and makes the entry for quantity received on his day sheet. When an order is received through the mail, telephone, or driver, it is turned over to the shipping clerk, who makes out a cellar order slip—Form 22—to which he attaches the correct number of stamps called for by the order, and sends this to the packing cellar. Here a stamp is attached to each package, which is then held ready for delivery to the driver. (See Form 22, page 145.)

No beer leaves the cellar unless the order for it is on record in the office; and to prevent beer being sent from the cellar unstamped or unrecorded, before it is allowed to leave, it must be registered. For this purpose a register is attached to the elevator door, slide or other method provided for taking beer from the cellar. The difference in the figures shown at night and at morning

......*Day*. *Date*...........19 *Weather*......*Temp*. °F. 12M. *No*.....

Stamps	½	¼	Route	Driver	Customer	½	¼	Memo.	Register
Balance									F.
Drew									S.
									F.
									S.
Totals Used					Totals				
On Hand									

Form 21—Day Sheet

DRIVER.......................... ROUTE No.......................

Date..

	½	¼

(Time)

Have Ready for **Delivery**

FORM 22—Cellar Order Slip

in the register will be the exact number of packages for which the shipping clerk has issued stamps.

Having loaded the beer on his wagon, the driver receives a delivery slip (Form 23) on which he is charged with the number of packages the load contains; and he must return signatures to the office showing that this amount of beer has been delivered. With country shipments the driver receives duplicate bills of lading (the triplicate being retained in the office), one of which he returns to the office properly signed by the transportation company. When delivery slips and bills of lading are brought back, the shipping clerk compares them with the day sheet, to see that the quantities signed for agree with the total taken out by the driver and that signatures have been obtained for all deliveries. He then adds his O. K. and turns them over to the bookkeeping department for entry into the "sales book," after which they are filed. (See Form 23 on page 147.)

At the end of the day the shipping clerk proves the three sections of his day sheet by footing "deliveries," to see that the number of half and quarter barrels agrees exactly with the number of stamps issued by him, and that the sum of the half and the quarter barrels is equal to the number of packages taken out of the cellar as shown by the register.

114. *Sales book (Form 24).*—The sales book is a loose leaf record with long and short leaves. Entries are made daily and proved in totals against the day sheet; extensions are made weekly and proved against the daily totals, and then posted to the customer ledger. The long sheets are used in order that names need be carried forward but once a month. (See page 148.)

115. *Billing.*—After the customer ledger has been posted, the bills are made out and proved in the following-

ROUTE NO. ....

DRIVER .... DATE ....

Beer	½	¼		Left A.M. ....
				P.M. ....
				Returned A.M. ....
				P.M. ....

½	¼	Signature

FORM 23—Delivery Slip

Week Ending..

Route	Names	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.		Total Sales		Amount of Sales	Returned	
		½	¼	½	¼	½	¼	½	¼	½	¼	½	¼	½	¼		½	¼
	Brought Forward.																	
	Carried Forward																	

FORM 24—Sales Book

ing manner: All bills are itemized and therefore must be made out from the sales book. The collectors are furnished with memo books which contain only totals, and hence are made up from the customer ledger. By comparing the bills with the collector book, each is checked and proved against the other. Postings to the controlling account in the general ledger are made once a month direct from the sales book; or by passing the sales book summary through the journal, and then posting.

This method, if properly carried out, gives a thorough and complete record of sales, furnishes to the customer a bill which he can compare with his own book, and equips the collector with the information necessary for his work.

116. *Collections.*—When making his returns, the collector writes out in duplicate a collection sheet (Form 25), which has full details of each individual collection on one side, and on the other a proof of the totals and an itemized record of the cash, checks, etc., which accompany it. The original is sent to the bookkeeper, who verifies the sheet as to rates, calculations and footings, and then posts it to the ledgers. This checking of the collector's sheet has to be carefully done, as the terms to customers vary owing to the different arrangements necessarily made for the repayment of loans, etc. (See page 150.)

A very good form of record for keeping terms, etc., is a 5 x 8 inch card, on which is placed the customer's name, address and terms, and from this the checking of the collectors' sheets can very quickly be done. Posting directly from this sheet saves time, preserves the original record of the collector as a permanent record, and enables the bookkeeper to proceed with his work

By .... Date... ....

	NAMES		Dis-count	Spend-ing	P.S.	L.F.	Cash.	Total Cust. Ledger	L. F.	Instal-ments S'dry Debtors	L.F

Cust. Ledger Posted	S'dry Debtor Ledger Posted	Entered Cash Book Fol.

FORM 25—Collections

CASH		PROOF OF CASH	
Bills		Cash	
Gold		P/S	
Packages		Discount	
Change		Spending	
Checks		Total	
Total			

FORM 25—Continued

immediately. The duplicate with the cash is handed to the cashier, who verifies his receipts, checks the footings and enters the totals of the sheet into the cash book.

117. *Cash book.*—Cash may be entered in one book ruled for debit and credit; or in two books, one for the cash received, and the other for cash paid. For large breweries the latter plan has the advantage that while the bookkeeper may be entering receipts, the cashier or another bookkeeper may use the other book for posting disbursements, thereby saving time. The book or books are arranged on the columnar plan with special columns for the controlling accounts, as customer's ledger (merchandise sales), sundry debtor ledger (loans), and accounts payable.

118. *Cash received (Form 26).*—This has columns for discount, spending, deposits (P/S and net cash), customer ledger, sundry debtor ledger and general ledger. At the end of the month the totals of the columns are posted to their respective accounts in the general ledger. (See Form 26 on page 152.)

The item "P/S" may require an explanation. Brewers, as has been stated, advance money to their customers for various purposes and on different securities, and some arrangement is made for the payment of these loans. If the arrangement be a weekly or monthly cash installment, the entry is simple; but the nature of a saloonkeeper's business is such that while a fixed amount to be paid weekly or monthly may easily be met during good business seasons, if business be dull, he may not be able to pay. To offset this, a plan is in use whereby a customer makes payments in proportion to his sales.

This plan is to divide the discount to which he is entitled into two parts, one of which he deducts when he

Date		L.F.	Dis-count	Spend-ing	L.F.	Deposits		Cust. Ledger	S'dry Debtors' Ledger	General Ledger
						P/S	Net Cash			

FORM 26—Cash Received

Date		Check No.		L.F.	Discount	Checks	Sundry Debtors' Ledger	Invoice	General Ledger

FORM 27—Cash Paid

pays his bill, while the other is credited to his loan. The latter is known as "percentage standing" (P/S), and is passed through the cash book in a special column provided for it and credited to the loan account, the total of the P/S column at the end of the month being debited to discount account and credited to sundry debtor ledger controlling account. This, it will be seen, is a journal entry passed through the cash book, but being a cash payment, it would require either a separate entry through the cash book or a journal entry for each payment when so made, which means additional labor.

Collection sheets are entered in the cash book in totals only, the postings being made directly from the sheet, as before shown; remittances by mail, or paid over the counter, are entered in detail, and posted from the cash book. Cash paid (Form 27) has separate columns for discount (credit discount earned), checks (credited to cash account), accounts payable (debited to accounts payable controlling account), and general ledger, the items in the general ledger column being debited to their respective accounts. (See page 152.)

This form of cash book allows for a proof on each side, because the sum of the discount and cash columns must equal the sum of the controlling account and general ledger columns; but thus outlined, it is intended for use when all receipts are deposited and all payments made by check, so that the balance of the cash account in the general ledger must agree with the bank balance, as shown by the check book.

For petty disbursements, a petty cash fund is created by drawing a check according to the requirements of the business, which is charged to the petty cash account in the general ledger, and remains intact. When the fund

is to be replenished, a voucher showing the amount and detail of disbursements is made, and a check drawn for the exact amount and charged as per voucher. By this method, the petty cash fund will always have the same sum of money as charged in the petty cash account, or will consist of currency and vouchers to make up this amount.

119. *Disbursements by check and currency.*—The best accounting practice requires that all receipts, whether checks or currency, be deposited in bank, and that all disbursements be made by check. Where this method is followed, a control over the cash can be exercised, which is not possible where only part of the receipts are deposited and part kept in the office for disbursements.

As, however, the latter plan is still followed, it is necessary to provide a record which will show separately the total receipts, the portion of receipts deposited in the bank, the disbursements made by check and the currency disbursements. These amounts can be shown by adding to the cash book two more columns (Forms 28 and 29) on the debit, and two more columns on the credit side, the one for bank and the other for contra. All receipts are entered in the cash column on the debit or receipt side. When a deposit is made, the amount is entered in the cash column on the credit or paid side (thereby reducing the cash in the office by the amount of the deposit) and carried to the contra column to preserve the equilibrium of the credit side of the cash book. The amount of the deposit is then also entered in the bank column on the debit or receipt side (to show that the bank is debited with the amount of the deposit), and carried to the contra column to preserve the equilibrium of the debit side. (See page 155.)

Date		L.F.	Dis-count	Spend-ing	L.F.	P/S	Cash	Bank	Contra	Cust. Ledger	S'dry Debtors' Ledger	General Ledger

FORM 28—Cash Received

Date			L. F.	Discount	Cash	Bank	Contra	Sundry Debtors' Ledger	Invoice	General Ledger

FORM 29—Cash Paid

Disbursements are entered on the credit or paid side; if made in currency, they are entered in the cash column, but if made by check, they are entered in the bank column. The difference between the two cash columns represents cash on hand, and may be verified by counting the currency in the till. The difference between the two bank columns represents cash in band, and can be verified by the balance shown in the check books. At the end of the month, the totals are posted to the general ledger: on the debit side P/S and cash are debited to cash account, and bank to bank account; and on the credit or paid side, cash is credited to the cash account, and bank to the bank account.

120. *Customer ledger* (*Form 30*).—As has been stated, the original collection slip is handed to the bookkeeper for posting to the ledgers, the credit side of the customer ledger being ruled exactly as the collection slip. It is copied in full, giving an exact analysis of every account, and permits verification of the discount, a feature not to be overlooked. (See page 157.)

In the customer ledger, the names are arranged according to the routes of the drivers, thereby facilitating posting from the sales book similarly planned; and as the collectors are usually assigned to districts, their returns with few exceptions will follow the order in which accounts are arranged in the ledger.

121. *Sundry debtor ledger* (*Form 31*).—The sundry debtor ledger contains the accounts with customers for charges other than beer purchases. These accounts are alphabetically arranged, and each account is subdivided into its component parts by sheets of different color and heading in order to show the transactions clearly. The features to be shown are: (1) Chattel mortgages, notes, cash loans, or advances, net beer bills transferred, etc.;

Sheet No....................

..............................Name..............................

..............................Address..............................

Date	Beer Del'd		Returns		Amt. of Sales	Footings	Date	All'ces		Discount	Spending	P/S	Cash	Total	Footings	Balance
	½	¼	½	¼				½	¼							

FORM 30—Customers' Ledger

(2) liquor tax loans; (3) chattel charges secured by chattel notes or chattel receipts—such as ice houses, pressure outfits and their maintenance, cash registers, tables, chairs, etc. (See pages 159–161.)

The items to the credit of sundry debtor accounts which appear on the collection slips are P/S and installments. P/S is generally a credit to chattel mortgages and notes, and in the majority of cases the installment item is a credit to liquor tax loans. The third set of charges undergoes few changes. Charges to the sundry debtor accounts are made from cash, journal and invoice books.

It is suggested that all subsidiary ledgers be of the loose leaf kind, for with the frequent changes occurring in the ownership of saloons, this method affords the means of transferring dead accounts, so that the current binder will contain only active accounts.

122. *Journal* (*Form 32*).—The totals of the invoice book or purchase journal, sales book and cash book are posted directly to the general ledger, leaving but few transactions to be journalized; but the entries passed through the journal frequently require posting to a subsidiary ledger, and for this purpose a columnar journal is of great advantage. A six-column journal having columns for customer ledger, sundry debtor ledger and general ledger, with writing space in the center, the debits to the left and the credits to the right, is a very convenient form. The items appearing in customer ledger and sundry debtor ledger columns are posted to the accounts in the respective subsidiary ledgers, and at the end of the month the totals are posted to the controlling accounts in the general ledger. (See Form 32 on page 162.)

123. *General ledger*.—A correct entry in its proper

Sheet No...........

Name............................

Address............................

Date	Particulars	Fol.	Chattel Mortgages	Sundry Charges	Total	Date	Particulars	Fol.			

FORM 31—Sundry Debtors' Ledger I
(WHITE)

Sheet No...........

Name...........................

Address..........................

Date	Particulars	Fol.	Dr.	Cr.	Bal.	Date	Particulars	Fol.	Dr.	Cr.	Bal.

FORM 31—Sundry Debtors' Ledger II
(Buff)

Sheet No...........

Name...........................

Address.........................

Date	Particulars	Fol.	Chattel Notes	Sundries	Total	Date	Particulars	Fol.	Chattel Notes	Sundries	Total

FORM 31—Sundry Debtors' Ledger III

(Blue)

Customers' Ledger	Sundry Debtors' Ledger	General Ledger	Particulars	General Ledger	Sundry Debtors' Ledger	Customers' Ledger

FORM 32—Journal

account in the general ledger is the last step of every bookkeeping transaction. If the various posting mediums have been properly designed, these entries are few in number, being principally totals.

The posting mediums, invoice book, cash book and journal are columnarized to facilitate this, the only column in each one of them which is posted in detail being the general ledger column, and this is done during the month. At the end of the month, as soon as all the entries are made and the work on these books has been proved, the posting of the footings of the columns to the general ledger will complete the entries for the month, and the bookkeeper is ready to draw off his "trial balance."

124. *Trial balances.*—Trial balances of the general ledger and of all the subsidiary ledgers should be taken at the end of the month. The trial balance of the customer ledger and sundry debtor ledger must agree with the balances of their respective controlling accounts in the general ledger, and the balance of accounts payable must agree with the unpaid items on the invoice book, or (if a creditor's or purchase ledger be kept) with the trial balance of that ledger.

CHAPTER XII

THE DEPARTMENT STORE

125. *Organization of the business.*—The department store is really a multitude of retail stores, each handling a separate line of goods, but all conducted under one management and usually under one roof. Like most other businesses, it is organized in an exceedingly simple and logical way. Each department comprises what would ordinarily constitute a small single-line store. The number of these departments varies: some large stores endeavor to keep them within reasonable bounds, while others multiply them almost indefinitely. They are known either by their names, or, more frequently, by a number which is arbitrarily assigned to them. Each is operated to a large extent independent of the others. The accounting system is so organized that the profits of each can be readily ascertained each day, and thus the means are at hand for a careful executive supervision over their operations.

126. *Economic advantages of the department store.*—The most obvious advantage is the possibility of the saving of over-head charges by the more complete utilization of high-priced men. The general manager of a department store may get five times as much as the same official in a store handling a single line of goods, but it is safe to say that he generally has much more than the same ratio of work, and that, therefore, he is made to earn a larger return in proportion to his salary than would be possible were his field of activity more limited.

Another advantage comes through the attempt of the department store to be all-sufficient for the average buyer. Many stores have increased their lines to such an extent that they claim to be able to satisfy any want of the buyer. The extent to which the department store can profitably extend its activities depends largely upon local conditions. In some localities, stores have built up a large and profitable business in house decorations, groceries and other goods, which in large cities are not usually handled by the department store because the small shop is more satisfactory and more economical. The department store, however, counts heavily upon the fact that the buyer does not have to seek some one who sells the particular article which he may need and for which he may never have inquired before: he goes to the department store feeling certain he will find it there.

127. *Advantages in advertising.*—One of the greatest advantages of the business is the more effective advertising which can be done by a large organization. A department store usually contracts for a certain amount of space, say a page, in certain newspapers each day. This space is divided among various departments according to the season of the year and the salabality of the goods offered. In the spring, for example, sporting goods may be given a very prominent place, out of all proportion to the size of this department as compared with the rest of the store. In the summer time vacation specialties come to the front. Clothing is given a prominent position in the spring and fall. The furniture sale is in August and the linen sale in January. By this method the department store is able, as it were, to throw the spot light upon the various branches of its business as each, in turn, arrives at the season of greatest demand. The advertisement of the clothing depart-

ment of the big store in the proper season of the year is so assertive that it literally forces itself upon the reader's attention, while the moderate space of a clothing store, which may perhaps do the same volume of business, is passed over because of its comparative insignificance.

128. *The higher credit of the department store.*—Practically all of these stores are constant borrowers, and their commercial paper is always found in the large money centers. Their very size commands for them the respect of banking interests. They are known, at least by name, over a large area of country and the commercial note brokers find that the country banker will purchase their paper in preference to that of other firms, perhaps just as sound, but of which he knows nothing.

This wide acquaintance is also valuable in enabling the store to sell its paper in the market where the money rate is lowest. The rate of time loans in Chicago may be 5 per cent while in New York it may be 3¾ per cent. The single line store finds no market for its paper in New York where it is unknown, and must, therefore, pay the higher Chicago rate. The Chicago department store, however, finds no difficulty in selling its paper in the more favorable locality.

The second reason why the banker more readily purchases paper of the department store is the greater safety of its business as compared with that of the single-line house. It is an old axiom that the more baskets one's eggs are in the less likely is complete disaster. Every single-line business is subject to unforeseen risks. Let us take the fur business as an example. The men at the head of the enterprise may have had many years of experience and be thoroughly familiar with every detail of their business: they may have bought con-

servatively and have purchased only the best skins; their goods may be strictly up to date in every respect; and yet there is no assurance that they will have a profitable year. The cold, severe winter which they relied upon for prosperity may not materialize; the winter may be open and mild and in consequence the demand for their product very light. They have bought their supplies largely upon credit and when the time comes to make payment they find themselves loaded with a large stock and without funds necessary to make settlement. Even should they be able to meet their obligations, the misfortune of the first year is likely to show in succeeding years. Their expensive furs have been made up into finished garments which may be out of style next year and may have to be sold at a sacrifice.

In the department store, on the other hand, the chances of loss are greatly minimized. The department selling furs may suffer as heavily as the single-line store but there are three hundred other departments which are having a normal season. The loss, therefore, will constitute a small item in proportion to the total volume of the department store's business and may not even be noticeable, for in ordinary times when people are busily employed, the difficulty is not so much that they stop spending, but that they vary their expenditures from year to year according to whim, fashion or the character of the season: the money which is not spent for furs is usually spent upon other forms of apparel. The most serious condition the department store has to meet is the slackening in demand due to business depression and the consequent reduction in people's incomes, which condition affects every other form of industrial activity.

129. *Advantages in discount.*—Having such excel-

lent credit the department store has no difficulty in securing the money necessary to take advantage of all trade discounts, indeed a large proportion of its stock is really bought with borrowed money which will be repaid out of the profits from the sale of the goods. No business organization is more eager to pay bills promptly if a saving can thereby be effected than the department store. These organizations are willing to pay for goods at the time they are unloaded from the manufacturer's wagon if sufficient inducements are offered; in fact, there are many cases where they will pay a portion of the cost in advance if it can be demonstrated that this will be a profitable investment upon their part. Many department store managers assert that a very large share of their profits comes from taking advantage of cash discounts.

130. *Financial operations.*—The financial operations of the department store are briefly as follows:

Requisitions come in from several departments for a certain amount of goods. The general office calculates the total represented by these orders and finds that certain amounts of money will be needed on certain future dates. It is their business to find this money and to make it produce the largest possible saving. The reason that almost every department store borrows is that it can make larger profits by using other people's money, which can be secured at cheap rates, than by using its own funds upon which a handsome profit is expected.

There are two methods of borrowing open to the store. The first is through the regular channel used by most businesses—that of discounting notes through banks. The various financial institutions in which the store carries an account have a general understanding

with the firm that they will discount its paper up to a certain maximum.

The second method of obtaining money is through the commercial note brokers. These men make a business of selling commercial paper to banks and other financial institutions and, to some extent, to private investors throughout the country. They have a regular clientele of buyers to whom they supply whatever paper may be needed to absorb their surplus funds. They have, on the other hand, various firms for whom they sell paper. The department store usually has close relations with several of these brokers and relies upon them to secure at least a portion of the money which the store needs. These notes are usually made by the firm to its own order, and endorsed by it. The period for which they run is carefully calculated so as to insure that the store will receive sufficient income to meet these obligations as they mature. Many stores adopt the policy of having their notes mature in series, that is to say, they figure out what their net income is likely to be, judging by past experience, in given weeks; and then have their notes mature so as to fall within this anticipated net income.

131. *The delivery service.*—Another important advantage which the department store enjoys is the superior delivery service which it offers. The organization of the delivery system is very simple. Its manager is one of the officials of the general office staff. He receives the goods from the various departments and delivers them over certain specified territory. The effectiveness of the delivery service of the department store is due to the large volume of business which it handles: it might not pay to run a wagon to deliver the

goods of the notion department, but when the same wagon is delivering goods in the same territory from three hundred other departments, it makes quite a large volume of work. This superior delivery service is particularly appreciated in the outlying sections of the city and in the suburban communities.

132. *How the buying is done.*—The buying of a department store is usually done by the several department heads, commonly known as the "buyers," who are responsible for both the purchases and the sales of their department, and are given wide latitude in making them. The head of a department buys such goods as he thinks will be the most salable and most profitable, and secures a certain space (for which he is charged rent), in which to display these goods. He is given a certain number of employés, whose salaries are charged against his department. He secures certain credit for advertising space and he is charged with his proportionate share of the delivery expenses and general expenses of the store. In return for all this he must earn not only the expenses of his department but also a certain profit. His success in this respect determines his value to the store.

A general supervision is exercised over the department heads by the general manager, or, perhaps, by a subordinate, sometimes known as the purchase manager, who has a sort of veto power over their requisitions. This is designed for a two-fold purpose: First, to prevent over-stocking, resulting in loss through a large supply of out-of-date goods; and second, in order to keep each buyer within a certain definite appropriation which has been allotted to him.

The actual buying is done by the department head. This official usually makes several trips a year to the

centers in which he can buy most advantageously. These may be either the large cities, such as New York and Chicago, or some European city where foreign novelties are displayed. Here he finds the representatives of the manufacturers who show him the staples and novelties which they are offering. He commands a large salary because of his knowledge of what goods suit his particular firm and will prove the most profitable. It is important to note in this connection that the department store rarely buys through the wholesaler, but generally deals directly with the manufacturers. The volume of their business enables them to offer an attractive proposition to the manufacturers, thereby saving the profit which ordinarily goes to the wholesaler.

The large single-line houses follow, at least up to this point, the practice of the department stores. They also send their buyers to the large centers and have almost equal facilities in the selection of goods. The great advantage of the department store comes through the existence of their branch offices maintained at such points as New York, Paris and London. These have a two-fold value to the store. In the first place, they are effectively advertised, especially in the case of novelties and specialties. We read much of "the latest Paris fashions picked up by our experts from that office." To a certain extent a store does enjoy an advantage of this character, but in most cases, it is simply a clever advertising devise. The chief value of these foreign offices is in the execution of post-season orders and in the early discovery of specialties and novelties which are likely to prove catchy.

183. *Post-season orders.*—No cautious buyer will purchase at the beginning of the season the entire

amount of goods which he thinks he can sell: he always allows a certain margin for contingencies and unexpected developments. He cannot tell just what goods will be the most popular, and the things which he thinks will be favorites may in reality be poor sellers. The replenishment of stock towards the end of the season, especially with articles which prove to be very popular, is a serious matter for the single-line store. The demand may be urgent, but the volume of the business will hardly warrant the expense of a high-priced man on another trip to New York or Paris. It is likely that the stores in twenty other cities have developed the same demand for some specialty which is turned out by one, or at best, a few manufacturers. If the single-line house orders by letter it is not certain that the order will be filled, for the manufacturer may have forty other letters all containing the same request, and it may be physically impossible for him to fill more than a small fraction of the orders. As a consequence the single-line house may not get any of the goods which it desires or only a small fraction. The second disadvantage is that there is not the same opportunity to secure the best price quotations as where personal interviews are possible.

134. *Branch offices.*—Both of these disadvantages are overcome, to a large extent, by the branch offices of the department stores. Instead of writing to the manufacturer whose business, we will suppose, is in New York, the department head, with the consent of the purchase manager, will write to the New York office explaining the urgency of the order and requesting vigorous work to secure its acceptance. A well versed buyer of the store, with years of experience, immediately gets out and hunts up the manufacturer who is selling

the desired goods. In most cases he can prevail over the man who must rely upon a letter. The consequence is that the department store stands a better chance than its smaller rival of participating in the profitable sale of specialties, where the demand exceeds the supply.

In the case of staple commodities there is the advantage that the New York buyer can secure the lowest prices which are being offered and does not have to take the prices which prevailed several months previous to the date of the order.

Finally the branch office becomes a collection agency for valuable information upon current trade conditions and other matters of interest to its firm. It is customary to have some one in this office write a daily or weekly letter containing information about such matters as the trend of prices, the condition of the various markets, the purchases of rivals, the late season novelties which are being offered; and other information of a similar character which might prove valuable. It is the duty of this office also to keep itself thoroughly informed as to the offerings of the manufacturers who usually maintain offices on the same street or in the same locality. Competent assistants are traveling around among the various firms getting ideas and samples. These are carefully gone over and such things as are valuable are either retained until the visit of the buyer or are forwarded to him.

The buyer of the department store, therefore, when he visits New York or Paris has had a tremendous amount of preliminary work done for him before his arrival. He can sit down and look over large quantities of samples and get a general idea of what is being offered. He can quickly locate those things which he thinks will prove popular and can have his order placed

and accepted long before the single-line house discovers the opportunity.

135. *Basis of accounting system.*—The basis of the accounting system of the department store as in every other business, is found in the character of the business itself. The accounting system must first of all enable the store's executives to have an accurate idea of the operations of each of these many departments, and must effectively promote the development of every economy which may be possible. The accounting system which has been developed accomplishes both of these purposes. It is one of the best illustrations of the possibilities of accounting in business organization.

CHAPTER XIII

DEPARTMENT STORE ACCOUNTING

136. *General office control.*—The entire control of the accounts of a department store is centered in the "general office," as it is popularly called, which is presided over by the general manager, who has jurisdiction over the entire establishment. The principal divisions of the general office are:

(1) The advertising department, which prepares the advertisements and attends to their insertion in the various publications used by the store; (2) the bookkeeping department, which has charge of the accounting of the store; (3) the credit department, which determines who shall be given the privilege of charge accounts and which fixes the maximum amount each individual may be given in a month; and (4) the delivery department, which delivers all packages to the customers.

137. *Organization of the departments.*—The number of departments in the large stores varies from seventy-five to three hundred and thirty. Each department has its head, sometimes called "the buyer," and sometimes "the department manager." Under him is usually an assistant department manager who is in charge during the absence of the buyer. Under the manager and his assistant are the aisle managers, popularly called the "floor walkers," who have charge of a certain section of the department, being responsible for its appearance and good order and the proper transaction of its business. The aisle managers are also required to see that

the regulations of the store affecting the public are enforced, such, for example, as the prohibition against carrying lighted cigars. The aisle manager also has direct supervision over the sales people in his division.

188. *The bookkeeping department.*—The bookkeeping department has charge of the accounting of the store. Through it all records must pass. It is divided into parts; the first portion has to do with the recording of receipts and payments of money; the second division handles all records relating to purchases made by the store and deals with all sales records.

189. *The system of ordering.*—The purchases of the department store are almost always made by means of regular order forms, which are usually made in quadruplicate. After the department head has prepared his order he takes it to the merchandise manager for approval. This approval is evidenced by the counter signature of that official. The buyer then refers the order to the order department for registration. This department also reviews the terms of purchase and the general provisions of the contract, which may be either stated or implied. After this has been done the order is then sent to the manufacturer, or dealer, who fills it under the terms and conditions specified in the special contract made between himself and the house, or the ordinary terms prevailing in the trade. The manufacturer receives the original order sheet; of the three carbon copies, one is retained by the buyer, one has been held by the merchandise manager, and the third is kept in the order department.

Every well-managed department store is very particular about outstanding unfilled orders, both because of the liability of loss through unsalable stock and because of the necessity for the financial manager knowing the

exact requirements of the store in each particular week in arranging to finance the business. In order to make certain that no error has occurred, the larger stores usually send out to their creditors, at stated intervals, a form of letter designed to check up any unauthorized orders or any orders which may for some reason have been lost sight of. Form 33 (page 178) shows such a letter.

140. *Handling of invoices.*—The goods, when received from the manufacturers, all go through the receiving room, regardless of what department they are intended for. It is a rule in most stores that every shipment of goods must be accompanied by an invoice. Where this rule is enforced the absence of the invoice causes the rejection of the goods at the door of the receiving room. The invoice may be delivered at the receiving room by the drayman or, if the goods come in by freight or express, it is found inside the package.

When the goods are unloaded upon the receiving platform the number of packages in the shipment is marked by the doorman on the back of the invoice and also on each package. The packages are then taken into the receiving room. This is usually a large room containing many sections or tables each of which belongs to a separate department. The goods are taken to the proper section or table and here unpacked. In the meantime the invoice has been passed to the entry clerk who stamps it with a number and makes the proper entries in the invoice entry book.

It sometimes happens that the goods as received do not tally with the invoices; they may be damaged or of an inferior quality and consequently all, or a portion of them, may be returned. Again, credit may be claimed for an overcharge, for shortage, or for some

GIMBEL BROTHERS

Philadelphia

ORDER-REGISTRY BUREAU

No............

In the cause of good management, we have created an Order-registry Bureau; you will kindly observe that all purchases on our account in order to be valid must be confirmed by an order duly registered there; any practice to the contrary will always be at Seller's risk.

Please use the attached in acknowledging receipt of this notice.

Respectfully,

GIMBEL BROTHERS

To............................

City............................

Dated........................19........

....

No............

We have yours of even number herewith advising us that all purchases on account of GIMBEL BROTHERS, to be valid, must be confirmed by an order duly registered in your Order-registry Bureau, and that any practices to the contrary shall not be good as a precedent. It will be our pleasure to observe this notice.

Outstanding orders for a/c GIMBEL BROTHERS amount to $.........
as per statement herewith.

Name.................................

City...............................

To GIMBEL BROTHERS,

Philadelphia

Order-registry Bureau Dated..........................

FORM 33—Form Letter

other reason. In such cases a memorandum charge is made out against the consignor and entered in a "returns and allowances" book. The effect of this entry is to credit the department returning the goods, or claiming the allowance, with the amount and to charge the account of the creditor for the amount of the claim. After this has been done a memorandum charge is mailed to the creditor.

141. *Auditing of purchases.*—The system of handling invoices covering goods received is such that by the time they have been returned to the entry clerk they have been reasonably well audited. This, however, is not a sufficiently thorough audit to satisfy most stores. At some convenient time, frequently the day after the invoices are returned to the entry clerk, they are sorted by the departments and entered on an invoice sheet whose purpose is to classify under each department the amount of goods charged against it during the day in question. This charge is frequently subdivided into two or more columns, each column covering the various purchase ledgers run by the store. If this classification by purchase ledgers is made, it is necessary to take the sum of the footings of the ledger columns in order to arrive at the total purchases of the store. In the same way the returns and allowances are entered on another analysis sheet of similar form. This department analysis is usually a very bulky record.

In order to classify and summarize the results, the totals of the ledger columns are frequently combined and transferred to a summary sheet which simply gives the daily total of the amount of the purchases and returns of each department in the store. This report is sent to the manager of the bookkeeping department and forms the basis for a journal entry charging the

several departments with their purchases and crediting the "creditors controlling account" in the ledger.

The purchase ledgers are ordinarily double account ledgers with a special ruling to receive journal entries. A form of purchase ledger in very general use is shown in Form 84.

142. *Payment of invoices.*—The work of settling with the creditors of the department store is an enormous task. There are hundreds and sometimes thousands of firms who have dealings with the store and each firm may have shipped several invoices during the month. In order to reduce the work of payment to a minimum the department store usually arranges to have all the bills of one month for the account of each manufacturer paid at one time, thus avoiding mailing several checks where one would suffice. In most of the large stores, also, the system of payment is so arranged that settlements, instead of being made on the tenth of the month, as is the case in the ordinary small business, are made on the various settlement days, six or more, scattered through the month. These may be, for example, as follows:

Invoices	falling	due	between	the	1st and 5th,	paid	on	the	5th.
"	"	"	"	"	5th and 10th,	"	"	"	10th.
"	"	"	"	"	10th and 15th,	"	"	"	15th.
"	"	"	"	"	15th and 20th,	"	"	"	20th.
"	"	"	"	"	20th and 25th,	"	"	"	25th.
"	"	"	"	"	25th and 30th,	"	"	"	30th.

It is important for the department store to rigidly observe the payment of its bills. As already seen, it owes a large part of its success to taking advantage of every discount which can be secured.

143. *Sales system of the department store.*—The sales force of the store is classified according to some system intended to simplify the work of sales account-

STORE NO.........................   PURCHASES—PERIOD ENDING........................

DEBIT

Reg No.	Date	Name	Firm	Dept	Amount	%	Dat-ing	Discount	Value Dating

CREDIT

Reg No.	Date	Name	Amount	%	Dat-ing	Discount	Value Dating

FORM 34—Purchase Ledger

ing. Each sales clerk upon entering service is given a number and assigned to the department in which she or he is to sell. These clerk numbers are variously arranged. Some firms adopt the system of numbering the clerks consecutively, regardless of the departments in which they are employed. This has the disadvantage of causing each department to have the numbers of its employés so scattered as to make any easy classification impossible. In order to avoid this difficulty some firms assign a block of numbers, say about 200, to each department, although there may at that time be only 75 employés in that department. The first department would have numbers 1 to 200 inclusive; the second would have numbers 201 to 400; and so on. This arrangement is intended to provide for future additions to the working force, as the business may expand. One difficulty with such a system is that it necessitates some department having employés numbered in the tens and hundreds of thousands, requiring much extra labor in making each record. Another difficulty is the danger that the system will be outgrown with the growth of the business: no one can foretell the extent of the expansion of each department, and when the block of numbers assigned has been exhausted, it is necessary to resort to various expedients, such as 400A, 400B, 400C, etc., which leads to confusion and many errors.

The third and best system is that of numbering the salesmen of each department from 1 up to the total number of employés; for example, department 58 might be "women's shoes and rubbers" and have salesmen numbered from 1 to 25 inclusive; department 74 might be "fur coats," with employés numbered from 1 to 30 inclusive.

144. *The sales book.*—Each sales clerk is provided

with a "sales book." This "book" is usually a pad composed of sales tickets, prepared in triplicate. The sales slips are numbered consecutively and the sales person is charged with the slips contained in his book and must account for every one of them. At the present time most firms have two sales pads for each employé, which are used on alternate days. On Monday white pads may be used, yellow on Tuesday, and white again on Wednesday, and so on. This difference in color is to assist the auditing department in assorting the sales tickets. The use of two books also enables the auditing department to have the previous day's pads for verification in making the audit.

The method of filling out the form varies according to the character of the sale and whether the goods are to be taken by the customer or delivered by the store. Sales may be divided as follows: First, cash sales, (a) package taken by the customer, (b) package sent; second, credit sales, (a) package taken by the customer, (b) package sent; third, C. O. D. sales, all of which, of course, are sent.

With regard to the cash sales, after the appropriate part of the sales slip has been made out by the salesman and sent with the cash to the cashier, there are various methods of handling the next step. One of the most desirable of these employs a special cash register, operated according to the ordinary method. As the machine opens the cash drawer, it prints the amount of the purchase in indelible ink upon two portions of the sales slip, at the same time cutting off one portion which remains locked inside the receptacle within the machine. The other portion is returned with the change to the customer.

In case of a credit sale the operation differs from the

foregoing chiefly in reference to the verification of the right of the customer to receive the goods upon a charge account. In almost all large stores the customers, when opening an account, are given some method of identification, usually in the form of a number stamped on a piece of metal designed as a "coin." The customer's account is known in the store according to this number. All of the accounts are then tabulated in a series of "verification books," one of which is placed in the hands of each cashier. When the charge sale comes through, the cashier consults the book to ascertain the status of the account. If for any reason the store does not desire to extend further credit this fact has been previously entered in the book opposite the customer's number, and the cashier refuses to wrap the package. If the account is found to be in good condition, the package is prepared for shipment or delivered to the customer in the ordinary manner. The only important difference in the case of credit sales is the requirement of the store that the sales person shall ascertain and insert on the sales slip the name of the person buying the goods. This is done to prevent disputes concerning the bill, when presented later, upon the claim that the goods were bought by an unauthorized person. The "charge sale" slip is, of course, not put through the cash register.

When the transaction is a C. O. D. sale the method of handling the sales slip is somewhat different. It is customary to paste the sales slip on a stout card upon the top of which is printed in large red letters "C. O. D." The purpose of this is to prevent the driver from delivering packages without making collections and to give him ample information concerning the charge in case any dispute may arise. The store also keeps an

accurate record of the C. O. D. packages turned over to the driver. When the driver delivers the package and makes the collection he tears off a certain portion of the sales slip which he returns, together with the cash, at the end of his run.

145. *Problems of department store auditing.*—The ordinary retail merchant can safely trust to a periodical audit of his books in addition to the daily supervision which he exercises. Usually the proprietor, or some responsible person, checks up the previous day's results by going over the sales slips turned in by his employés. In addition, the transactions of his store are kept in a separate and distinct set of books. It is, therefore, possible at any time to verify the correctness of the records.

In the department store this daily supervision is impossible because of the large volume of transactions and also because the several departments do not keep their own books, but the entire results are merged into one set of books kept by the bookkeeping department. It follows that the only practical kind of an audit for the department store is the continuous audit, which must be made daily. The auditor is a permanent and important member of the administrative staff, having under him many clerks and employés.

146. *Auditing cash sales.*—The cash sales tickets are collected from time to time from the lock boxes inside the cash registers on the counters of the department cashiers. These are taken to the auditing department and sorted. It is possible that each cash register may contain the slips of one or more cashiers, owing to the relief of the regular cashier by a substitute at lunch time. The first duty of the auditing department is, therefore, to sort out the cash sales tickets according to the cashiers' numbers. After this has been done the

tickets of each cashier are again gone over and assorted according to sales clerk numbers and finally, after this has been completed, the tickets of each sales person are arranged consecutively according to the ticket numbers printed upon the slips. When this has been completed the totals called for by each voucher is entered on the cash sales entry sheet (Form 35).

At the top of the sheet, in the left hand corner, appears the cashier's number, which is 20 in this case. Below is a series of columns running from 1 to the number of the employés in the department. In each of these columns is entered the sales which the sales person bearing that number has made during the day. A few only of the entries on the sheet for the day in question have been inserted. Salesman No. 1, for example, has made several sales ranging from a few cents up to several dollars. At the foot of the column the total is taken of the sales by each sales person, while the last entry on the lower right-hand corner of the sheet indicates the total cash sales of all the clerks in department No. 1.

147. *Handling of transfer sales.*—The transfer is a device by which a customer can more easily purchase goods from several departments. He seeks out one of the transfer desks scattered conveniently throughout the store, and secures a card which he presents to the salesman in each department when making a purchase. The salesman enters on the sheet a short description of the quantity, the kind of goods and the price. The goods, instead of being given to the customer or wrapped separately, are sent to the transfer desk. After the customer has completed his shopping he takes the card to the transfer desk where the amounts are totaled and verified. Payment is here made for the total bill.

Cashier No. 20. FRIDAY MAY 13, 1909

SILKS AND VELVETS

	1		2		3		4		5		6		Etc.
	1	18											
	1	14											
	3	29											
	1	14											
	8	16											
	2	13											
	55	13	29	16	18	14	19	36	42	17	46	19	
											211	15	

Form 35—Cash Sales Entry Sheet

When the various purchases arrive at the transfer desk they are wrapped in one package and sent to their destination.

The transfer records are audited by making up a sheet similar to that described for the salesman but which simply classifies the sales according to the department. After this record has been completed the auditing department then proceeds to verify the entries made upon the two sheets, viz.: the cash sales entry sheet and the transfer entry sheet. This is done by comparing the entries for each salesman with the tissue sheet remaining in the sales book. The system of using different sales books on succeeding days, already referred to, enables the auditing department to have the sales books on the following day for making the audit. After this verification has been accomplished, the department next prepares the balance report, which is simply a sheet having special columns for each department, 1, 2, 3, 4, etc. This report is shown in Form 36.

148. *Balance report.*—In each column of this report is entered the total cash sales of each salesman, which are then footed up. Under the total cash sales footing is inserted the amount of transfer sales for the department. Below that is added the sales which came in through the mail order department. It is customary to indicate the last two items by some special form, such as shown in the above illustration.

We now have a complete record of the total cash business done by the department. The columns are then footed and the total of the columns is taken. This, in the illustration given, amounted to $2,559.62. A verification is now made between the total of these footings and the total amount of cash actually turned in by the cashier. We find on this day that there was a slight

1	2	3	4	5	Etc.
66.00	45.21	.99	250.00		
30.00	200.59	.95	500.00		
40.00	95.81	.44	400.00		
32.29	64.20	5.65	10.00		
41.50		20.75	5.00		
		40.91	5.00		
		.29			
		.50			
		.60			
		1.00			
		2.00			
		1.25			
209.79	405.81	75.33	1,170.00		
311.41x		190.24x			
74.46*	95.40*	27.18*			
595.66	501.21	292.75	1,170.00		

NOTE—Department Number 1 is PLATED SILVERWARE. Department Number 2 is SOLID SILVERWARE. Department Number 3 is PLATED JEWELRY. Department Number 4 is SOLID GOLD JEWELRY AND DIAMONDS. x Are Mail Orders. *Are Transfers.

FORM 36—Balance Report

difference, which is not infrequent. Any difference less than ten cents is usually disregarded; a shortage of ten cents or more is charged to the cashier, while any over amount received in excess of the proper sum is credited to the "over account" from which is paid any claims for short change on the part of the customer.

It is interesting to note that each cashier is given a certain amount of money, say $50, each morning with which to make change. Collections are made at fixed intervals during the day from the cashiers. Each cashier is given a receipt for the amount of money turned over to the collector. The receipts and the money at the end of the day represent the total amount of cash taken in by the cashier. Every cashier at the end of the day's work makes up her report showing, first, the amount of money on hand at the beginning of the day; second, the amount of receipts held for cash turned in; and, third, the amount of specie and bills on hand at the close of the day. It is these reports which are entered upon the balance sheet.

149. *Cashier's report.*—It is customary, after this verification has been made, for the auditing department to prepare the cashier's report (Form 37). This shows the disposition which has been made of money taken in by the store during the day.

The practical effect of this investigation is two-fold: First, to verify the accuracy of the record of moneys received; and second, to prepare the way for the entries in the general cash book showing the result of the day's work. Cash is debited in the general cash book for the total amount showing on the cashier's report while the various individual departments, whose accounts are carried on the general ledger, are credited with the

Date..................190....

	Bal.							Over	Short		Bal.							Over	Short
1										53									
2										54									
3										55									
4										56									
5										57									
6										58									
7										59									
8										60									
9										61									
10										62									
11										63									
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44										96									
45										97									
46										98									
47										99									
48										100									
49										101									
50										102									
51										103									
52										104									

FORM 37—Cashier Report

	Bal.							Over	Short
105									
106									
107									
108									
109									
110									
111									
112									
113									
114									
115									
116									
117									
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154									
155									
156									
157									
158									
159									

	Bal.							Over	Short
160									
161									
162									
163									
164									
165									
166									
167									
168									
169									
170									
171									
172									
173									
174									
175									
176									
177									
178									
179									
180									

Bank							
Office Refunds							
Gen'l Refunds & Exc's							
Vouchers							
Pay Roll							
Cash Adv. Ref's							
Cash on Hand							
Short							

FORM 37—Continued

respective amounts which they have contributed to this total.

150. *Auditing of charge and C. O. D. sales.*—The process of auditing these sales is very similar to that already described. The tickets are first assorted as in the cash sales, but instead of arranging them according to cashiers they are classified by departments. The slips are then entered upon a form practically identical with the cash sales entry sheet already shown, except that the upper portion of the sheet is used to indicate charges. The results shown in the sheet are then checked up with the sales books.

After this has been done the body of the sales slips is sent to the individual ledger bookkeepers. These clerks transcribe the sales slips into individual ledgers. At the same time they prepare a daily balance sheet, which in most stores is simply a sheet ruled to contain a column for each department. The individual bookkeeper enters the amount of each sale in the proper department column, as shown by the sales slips and by his individual ledger record. After this has been done the sales slips are then passed on to the billing clerks, who proceed to make out the bills.

151. *Billing to customers.*—The department store differs from the ordinary business in that the bills are started on the first day of the month and entries are made on each day that any purchase occurs. It differs from the customary bill in that the sheet is so arranged that the making of the bill prepares a carbon showing all of the items which appear upon the original bill. Usually the bills are made out upon billing machines. The billing clerk will take the sales slips of each customer for the day and after selecting the bill from the files will proceed to enter a copy of the sales slip, extend-

ing the total into the daily total column. At the end of the month, all that is necessary is to foot up the daily totals which should give the total amount owing by the customer, less any credits which may have occurred through the return of goods or over-charge. These are entered when the credit slip is received by the individual ledger bookkeeper, both upon the individual ledger record and by the billing clerk upon the customer's bill.

When the end of the month arrives and the totals of the bills and the individual ledger sheets have been made up and found to agree, the bill is then torn off from the duplicate and mailed to the customer, while the duplicate is filed in a binder for future reference. At the same time the daily balance sheets made up by the individual ledger bookkeeper are summarized upon one sheet, furnishing the basis for the journal entries crediting the departments for the total charge sales for the month and debiting accounts receivable, which is the general ledger controlling account over the individual ledgers.

The C. O. D. sales are audited in much the same way as the charge sales, the effect of the final entries on the general books being a debit to cash and a credit to the department making same.

152. *Accounting for expenses.*—Our final inquiry concerns the handling of the expenses of the store. Every department, when incurring an expense, must do so upon one of the regular requisition blanks. (See Form 38.) The form shows, as far as possible, previous purchases on the same account, so that a check can be had as to quantity. This is to avoid buying supplies when a stock of the goods may be on the shelves overlooked.

In the supply department a record is kept of each

class of supplies. The printed blanks generally take a form number, and in some instances the stock of forms is arranged in lines by form number for easy location.

The expense summary sheet (Form 39) shows the allocations of expenditures among the various departments.

It is interesting to note the degree to which the department store carries out the idea that each department is in reality a separate store. The advertising expense of the entire store is prorated among the departments; for example, a store has 250 square inches of advertising in the daily papers; this will be subdivided according to the proportion which each department's space area bears to the total space area of the store. The buying expenses are correctly ascertained. The insurance on the stock is prorated upon the basis which the stock of the department bears to the total stock of the store. Each department is also charged with the interest on the money invested in the stock on hand. The same idea is carried out in the apportionment of rent: no matter whether the store owns its buildings or leases its quarters, it charges a certain rent for the building. This is apportioned among the various departments in accordance with the desirability of their location. The final entry concerns salaries, which represents total amount paid to the managers and employés of the department.

These summary sheets are used to show the expenses for the department since the beginning of the year; for example, the sheet in question might cover the expenses from February 1 to 9, inclusive, or eight days. The total shown at the bottom of the sheet as of February 9 would be transferred to the next sheet and labeled

REQUISITION { To be signed before 9 A. M.

CHARGE DEPT.................. Date..........mo...........190

For what purpose..

Have you used this article before, if so, account for the old one.............

....

Do not be wasteful! Don't buy goods more expensive than needed.

Stop supper checks. Seek to reduce quantity. Check disposition to order feather dusters.

Exact Quantity	Goods		
	*Not good for any large amount. *Not good for any expensive article. *Before buying consult.................... who will sign if he approves, otherwise hold this up.		

You are expected to be as economical in ordering goods for store use as though you paid for them yourself.

Signed..
(Write name plainly.) Head of Department

To the Purchaser of Supplies:

Where description and value are left blank, then, only an ordinary or "stock" article is intended.

For instance:—If requisition read "one book," you must understand thereby that the one who signed for the firm only had in mind a book of ordinary kind and of nominal value, and you would have no right on such a requisition to have a book of special type made to order, or to buy an expensive one.

Requisitions ordinarily given are always intended for goods to be bought in the store, and you should not go outside without first having had an understanding with proper authority about same.

You are expected to inform yourself on the necessity for every requisition issued, and in the exercise of sound economy to resist the same or not.

Where no quantity is stated, then only a limited or hand-to-mouth supply is meant.

The above, so far as it may apply, is also intended for the guidance of the Head Engineer and Head Carpenter when ordering goods.

*Approved......................................

FORM 38—Requisition

FEBRUARY 1ST, TO

	Advertising		Buying Expense. Domestic		Buying Expense, Foreign		Insurance on Stock		Interest on Stock	

FORM 39—Expense Summary Sheet

DAYS SALES STORE No.

Bargain Table Rent	Store Rent	Window Rent	Salaries		
				Advertising Buying Exp. Domestic, " Foreign Insurance on Stock Interest on Stock Rent, Bargain Tables " Store " Windows Salaries Sundries	
				General Expenses	
			Sundries	Difference between Estimated Stock and Inventory	
				Total % To Sales	
				Gross profit per day Net Expense Net Loss or Gain	

Form 39—Continued

STORE No.

	Alterations and Repairs to Fixtures	Boxes	Card Writing	Car Fares	Contract Expense	Decorating Expense	Drayage

	Sundries	Suppers	Telephones				

Form 39—Continued

Express	Freight	Mercantile Tax	Postage	Sales Books	Stationery and Printing	
					Summary	

FORM 39—Continued

"February 10th" to which would be added expenses for the next period. Thus the store carries from sheet to sheet the total amounts expended for various items from time to time and at the end of the year the total amount of each column will give the total expenses for the year. At the end of the month these summary sheets are used to make the entries in the controlling books. The effect of these entries is to credit cash for the amount and to charge the various departments for the total during the month.

A department is thus charged with all its purchases and expenses and credited with the sales made by it. By taking into consideration the values of the inventory of the stock on hand, as is usual in any business, the profit of the department for the year is easily ascertained.

153. *Annual report.*—The annual report of a department store is prepared from the general ledger and consists of a statement of assets and liabilities at the close of business on the last day of their fiscal year, together with a statement of profit and loss, showing the profits earned for the fiscal year just ending. A copy of an annual report of a department store is a very common form and can be had from almost any commercial or financial magazine.

CHAPTER XIV

GAS ACCOUNTING

154. *Problems of gas accounting.*—The problems in gas accounting are two-fold, first, those concerned with the manufacture of gas; and, second, those arising from its distribution and the collection of income from the consumers. Corresponding problems are met with by every public utility company, consequently their accounting methods are almost identical with those of a gas company.[1]

155. *Principal books.*—The principal books used by a gas company are: (1) The cash book; (2) the general ledger; (3) the purchase book or invoice register; and (4) the consumer's ledger, which is a combination of the sales book and accounts receivable ledger.

156. *General ledger.*—For the present we will pass over the cash book and take up the general ledger. In this book are carried a great variety of accounts which include those dealing with the expense of operation as well as the stereotyped financial accounts found in all corporations. We need only give detailed attention to the former class of accounts. The expense accounts which are carried in the general ledger must follow closely the processes of manufacturing, for their purpose is to reflect accurately the cost of manufacturing

[1] As an aid to the study of gas accounting it is worth while to know something about the process of gas manufacture. A concise account of this process is given in the "New International Encyclopedia." The reader will probably find a satisfactory account in any good encyclopedia.

the gas and of distributing it from the gas-holder through the meter to the consumer.

157. *Classification of the accounts.*—A committee of the American Gas Light Association has formulated the following classification of operating accounts, which are self-explanatory with the information already given:

A. 1. MANUFACTURING COAL GAS

1. Boiler Fuel Coal Gas.
2. Enricher Coal Gas.
3. Expense Works Coal Gas.
4. Fuel Under Retorts.
5. Gas Coal.
6. Mfg. Labor Coal Gas.
7. Purification Supplies Coal Gas.
8. Purification Supplies Coal Co.
9. Repairs Works Coal Gas.
10. Water Tax Coal Gas.

EXPENSE ACCOUNTS

11. Ammoniacal Liquor Expense.
12. Coke Expense.
13. Tar Expense.

A. 2. MANUFACTURING WATER GAS

1. Boiler Fuel Water Gas.
2. Expense Works Water Gas.
3. Central Fuel.
4. Mfg. Labor Water Gas.
5. Oil Water Gas.
6. Purification Labor Water Gas.
7. Purification Supplies Water Gas.
8. Repairs Works Water Gas.
9. Water Tax Water Gas.

B. DISTRIBUTION

1. Complaint Expense.
2. Distribution Office Expense.
3. Gratuitous Work.
4. Repairs Mains.
5. Repairs Services.
6. Repairs Meters.
7. Setting and Removing Meters.
8. Street Mains Abandoned.

C. COMMERCIAL EXPENSE

1. Expense Collection.
2. Expense Office.
3. Office Salaries.

D. EXPENSE

1. Accidents and Damages.
2. Association Meetings.
3. Expense General.
4. Expense Extraordinary.
5. Insurance.
6. Interest.
7. Litigation.
8. Salaries General.
9. Uncollectible Bills.

E. NEW BUSINESS

1. Advertising.
2. Appliances Demonstrations.
3. Expense Soliciting.
4. Gas Appliances.
5. Gas Engine Expense.
6. House Fitting Expense.

F. TAXES

G. STREET LAMP OPERATING

H. OPERATING EXPENDITURES

I. INTEREST ON BONDS

J. DISCOUNT

The operation of these accounts is easily understood when we recall the principles of cost keeping which are applicable to the gas business. Every gas company runs a number of stock or inventory accounts.

158. *Purchases of supplies.*—The first step in the purchase of supplies is the filling out of a requisition. This is usually done by the superintendent of the plant. If the company is large the requisition will probably be sent to the purchasing agent, whose duty it is to secure bids for supplying the amount of material called for in the requisition. The order is finally placed with the successful bidder, and in due time the goods called for are received by the purchasing department. After the quantity and prices are verified the proper entries are put in the purchase book, debiting the various stock accounts in the general ledger, the titles of some of which are as follows:

(1) Boiler fuel stock; (2) generator fuel stock; (3) gas coal stock; (4) fuel under retorts stock; (5) enricher coal gas stock; (6) oil water gas stock.

159. *Record of consumption.*—As the supplies are used a record is kept of the quantity consumed. This, in most cases, can be accurately done. Coal, for example, is weighed as it is brought to the coal retort before being used under the boiler. The oil is measured by passing it through a meter. In fact some scheme is devised by which every form of supply is recorded as used. These statistical records are carried until the end of the month, when the total amount which has been used is ascertained and a transfer entry made, crediting the proper stock or inventory account with the cost price of the material used, and debiting the expense account for the same sum. For example, the cost of coal used under the boilers in the manufacturing proc-

ess, would be credited to the boiler fuel stock account, and debited to the boiler fuel account. This system enables the company to take a book inventory of the supplies on hand at the end of each month. At stated times, say once a year, these book inventories are verified by an actual inventory of stock.

160. *Voucher payments.*—Let us turn our attention for a moment to the credits appearing in the accounts of the parties from whom the materials have been purchased. At certain dates payment of the accounts is made by checks which are debited in the cash book to "accounts payable" and credited to "cash." Each bill, before payment, is transcribed on a voucher made in duplicate, the original being enclosed with the check to the creditor, while the duplicate is filed for reference purposes.

In addition to the place devoted to the approval of the payment, the blank also provides for the receipt of the creditor for the amount enclosed. The voucher, after being signed by the creditor, is returned to the company, and furnishes with the canceled check, a duplicate evidence of payment.

161. *By-products.*—The utilization of by-products which were formerly regarded as waste is a feature of modern industry, which has added materially to the profits of manufacturing concerns. A very interesting portion of a gas company's accounting deals with these by-products.

The crude material which may be regarded as waste incurred in the manufacture of the main product—in this case gas—has cost a certain amount of money, which must be charged against the main product. The coal used is not entirely consumed, and the residue composed of a poor quality of carbon and ashes, which we

call coke, is a waste so far as the business is concerned. But it happens that in thickly populated sections this coke can be broken up in uniform pieces, smaller in size, and sold to householders, who use it for fuel. The waste matter can thus with a slight additional expenditure, be placed in marketable condition.

162. *Accounting for by-products.*—The accounting system of a gas company, following the general rule, regards the coke taken out of the gas retort as having cost them nothing: the total cost of the coal and the cost of the labor required to remove the residue from the retort has been included in the cost of manufacturing the gas. The company then proceeds to put this coke in marketable condition. The chief item of expense is the cost of labor required to break it up so the company carries an account in its general ledger called "coke expense." Similar accounts are carried to cover the cost of preparation of every other by-product that the company puts out. There are three such expense accounts usually carried, "ammoniacal liquor expense," "tar expense," and "coke expense," which represent respectively the expense incurred in the preparation of ammonia, coke, and tar for the market.

163. *Coke residual account.*—Let us suppose that a company expends $500 in the course of one month on the preparation of coke for the market. There will be a debit of $500 to the "coke expense account," and a consequent credit to cash for the amount paid out in labor, etc. The expenditure of this sum has resulted in the preparation of a large amount of coke for the market. This coke, we will assume, sells for $5,000. The company will debit the "coke account" for $5,000 and credit another account carried on the general ledger, known as the "coke residual account" for the

same amount. The purpose of the latter account will presently be made clear.

The practice of charging the coke account with the price of the coke seems at direct variance with the fundamental principles of the proper method of accounting for finished stock. Several explanations for this difference have been offered but none of them are entirely satisfactory. When the coke is finally sold the coke account is credited with the amount received from the sale of the product, while either the cash account or accounts receivable is debited for the corresponding amount of the sale. The final step is to transfer the $500 of expense incurred in the preparation of the coke for market from the "coke expense account" to the "coke residual account." The "coke residual account" now shows a debit of $500 and a credit of $5,000, so it is obvious that the difference between the two amounts represents the profit from the sale of the coke. In case the sales price should not agree with the price at which the "coke account" was originally debited an adjusting entry is made closing out the difference from the coke account to the "coke residual account," thus showing this additional gain or loss in the residual account where it properly belongs.

CHAPTER XV

GAS ACCOUNTING (*Continued*)

164. *Methods of measuring gas.*—We now turn to the methods by which a gas company keeps the record of its sales and the accounts with its customers. The gas business is one in which the company has accounts with many customers, and the average amount of charges is relatively small. The company must, therefore, have a very economical and efficient system of accounting in order to make any profit.

The basis of the charges is secured from a meter. This makes it necessary for the company to have meters to measure the gas used by customers, the meters being located on the premises of the customers. There are two kinds of meters commonly used for this purpose. The first is the ordinary meter which measures the gas used by the cubic foot or fraction thereof, the measurement being indicated upon its face. The second is frequently installed on the premises of customers consuming only a small quantity of gas, and is known as the slot meter. This is a device by which the customer deposits a quarter in the slot and as a result a certain amount of gas is passed into the meter, according to the rates of the company. When this portion of gas has passed through the meter the gas supply is cut off until another quarter is deposited in the slot. The ratings of these meters are taken regularly by the company's employés.

165. *The slot meter.*—Before we discuss the ordinary gas meter, let us take up the slot meter. When the inspector visits the meter, he takes out the money which has been deposited from time to time since his last visit. He then fills out a slip shown in Form 40, page 211.

The number appearing on this slip refers to the customer's number on the books of the company. This has been filled out in the office before the slip was turned over to the inspector. The location of the meter and the name and address of the customer are also filled out in the office, and later verified by the inspector. This form provides space for six reports for each customer; one is detached on each visit and turned in by the inspector, together with the cash, to the office. This becomes the basis for the book entries of the company.

166. *The ordinary meter.*—In case the meter is a simple one of the ordinary kind recording the amount of gas consumed within a certain time, the inspector will be given a report blank similar to that shown in Form 41, pages 212–213.

As in the case of the slot meter, the name and address of the consumer and the ledger folio of his account have previously been inserted by the clerk in the office. The sheet contains sufficient space for the results of twenty-four visits to the property, or for approximately two years. The inspector notes the reading of the meter at each visit. The portion of the form headed "Meter" is simply divided for keeping statistical records of the meter on the property. It may be that in the two years covered by the record sheet it has been necessary to remove or transfer the meter, and this space affords a place for the recording of such changes. On the back of the form a space is provided for the inspector to note such remarks as may be necessary con-

Account No....................

Meter No......................

Location of Meter.

Cellar.........Floor...........

....

Name,

....

Address,

....

Account No...........

Meter No...........

Index................00

No. of Quarters......

Amount Lifted.............

Credit Dial......

Date Indexed and Collected

....

By........................

Account No........

Meter No.............

Index...........00

No. of Quarters.....

Amount Lifted.............

Credit Dial......

Date Indexed and Collected

....

By........................

Account No..........

Meter No..............

Index.............00

No. of Quarters....

Amount Lifted.............

Credit Dial.......

Date Indexed and Collected

....

By........................

Account No..........

Meter No..........

Index................00

No. of Quarters......

Amount Lifted.............

Credit Dial......

Date Indexed and Collected

....

By........................

Account No........

Meter No..............

Index...............00

No. of Quarters......

Amount Lifted.............

Credit Dial........

Date Indexed and Collected

....

By........................

Account No..........

Meter Mo..............

Index...............00

No. of Quarters......

Amount Lifted.............

Credit Dial..........

Date Indexed and Collected

....

By........................

Form 40—Slot Meter Report

PREMISES

Street.. No.............................. Ledger Folio .... Line

METER					CONSUMER
Size	Number	Set	Removed	Transferred	

DATE	INDEX	DATE	INDEX	DATE	INDEX	DATE	INDEX

USE BACK OF THIS SHEET FOR REMARKS

FORM 41—Ordinary Meter Report

Meter Inspectors will note below reasons for not securing index, also leaks or other complaints

DATE	REMARKS	DATE	REMARKS

FORM 41—Continued

cerning leaks in the gas pipes or meter, or discrepancies in the readings on the meter, or any complaint by the customer as to the services of the company. These record sheets when turned into the company's office form the basis for the entries in the consumer's ledger, charging on the books of the company the various amounts to each customer.

167. *Consumer's ledger.*—This is modeled on the same lines as the Boston ledger of a bank. The accounts are kept alphabetically but by street location. All accounts of consumers located on 34th Street, for example, will be contained in the "T" ledger, and will be arranged consecutively according to house numbers. The company usually keeps a cross-index of its customers by name, in order to locate the residences thereby, or the account in the consumer's ledger, in case this becomes necessary. The information in reference to the entry is simply transcribed from the inspector's report. The balance outstanding, plus the amount due at the end of each month, plus any amount for charges due from the preceding month less the amount paid equals the balance outstanding for the next month.

This consumer's ledger is only used for those accounts where a charge meter is installed. The pre-payment ledger, as the slot meter form of a ledger is called, is much the same as the consumer's ledger. The only difference is that there is never any amount outstanding as being owed by the customers.

168. *The gas bill.*—After the customer's ledger has been posted up at the end of the month, the clerks prepare the bills which are then mailed to the customer. Most gas companies adopt the policy of having separate bill forms for each class of consumers, in case such companies supply fuel and illuminating gas at different

rates. The distinction between them is entirely theoretical, for the gas is the same in both instances. The company merely gives a discount on gas used for fuel purposes to customers using a large quantity. This is necessary in many cases in order to secure a large amount of business. A man will, for example, hesitate between using a gas engine and a gasoline engine, unless the gas is supplied to him at lower rates than that for which he can purchase gasoline. The bills are usually printed on different colored paper, the purpose of which will explain itself later. When the bills come in from the customers, or when they are presented at the various offices of the company together with the money for their payment, one portion of the bill form is receipted and returned to the customer. The other portion is detached and sent to the clerks who have charge of the daily cash receipt book.

169. *Daily cash receipt book.*—We have already seen that the gas company handles a very large number of accounts, which would make the entry of every transaction into the general cash book a very laborious and expensive piece of work. The company, therefore, runs a daily cash receipt book in which the receipts of money from incoming bills are recorded. This cash book is shown in Form 42, pages 216–217.

At the end of the day the totals as shown by the daily cash receipt book are transferred to the general cash book.

170. *Debit side of the general cash book.*—The debit side of the general cash book, to which this daily cash book's totals are posted is shown in Form 43. It will be seen that the columns are similar to those provided in the daily cash book. The bills, as rendered, are charged to the gas sales account in the general ledger and are

Folio	Name	Illuminating Current Sales Discount	Illuminating Current Sales Net	Fuel Current Sales Discount	Fuel Current Sales Net	Date
	Amounts Forwarded					
	Amounts Forward					

Form 42—Daily Cash Receipt Book

....190

Delinquent Bills		Interim Sales		Sundry Sales	Deposits		Total
Discount	Net	Discount	Net				

FORM 42—Continued

DATE	Ledger Folio		Current Sales		Delinquent Bills	
		Amounts Forwarded				
		Amounts Forward				

Form 43—Debit Side of the General Cash Book

DR.

Interim Sales	Deposit	Sundry Sales			Total

Form 43—Continued

credited to the gas account at the same time. The gas sales account is thus in reality an accounts receivable account controlling the consumer's ledger. The gas account, on the other hand, is a revenue account of the company, showing the total gross income received from the sale of gas. There are a number of other important revenue accounts, some of which are, for example:

(1) House and rental account, showing income received from rents of properties owned.

(2) Merchandise account, showing the income from the sales of stoves, supplies, etc.

(3) The profit and loss account.

The columns in the general cash book, therefore, are in effect the controlling accounts with the various classes of customers carried in the general ledger. The deposit column is the one exception to this rule. This column is used to record the amounts received from customers, as required by some companies, in order to guarantee the payment of the bill for gas thereafter used.

171. *Posting of cash debits.*—At regular intervals, usually monthly, the totals as shown by the debit side of the cash book are posted to their respective ledger accounts. The effect of such posting is expressed by the following journal entry:

Cash, Dr.

To accounts receivable and deposits.

The credit to the various accounts receivable offsets the charges to them at the time the bills are rendered, as has previously been explained, while the credit to the deposit account sets forth the liability of the company for money received from customers in the nature of a trust fund, which must subsequently be returned to them when the bills are paid.

172. *Pay rolls.*—Before we consider the credit side of the general cash book, it is necessary for us to ascertain the method of keeping pay rolls. Perhaps the largest portion of the gas company's outlays is the payment for labor. Every man in the employ of the company, except while working within the confines of the plant, is required to keep a daily time card. This gives the date and the name of the employé, and shows the number of hours devoted during any day to the various classes of work performed by him. The report for an outside man in the distribution department is shown in Form 44, page 222.

This time card is turned in at the end of the day to a foreman who verifies its correctness and signs his name to it as an indication of approval. The card then goes to the pay-roll clerks, who transfer the hours to the proper account upon one of the regular distribution time vouchers (see Form 45, pages 223–224).

The same general voucher form is in use for the other departments. The manufacturing department, for example, uses a form in which the various items of manufacturing cost are set forth.

After the total hours have been determined, the amount of money chargeable to each account is extended in the proper column. The totals of these accounts should equal the total sum which the company owes to each particular workman. The bottom of the form is a receipt which the workman is required to sign when his wages are paid to him. In order to secure the money with which to pay the workmen it is necessary that a pay roll be constructed from these various time vouchers. This is done by combining the information on the vouchers on a pay-roll blank (Form 46, pages 226–230).

DATE..190

DAILY TIME CARD

....

NAME...

HOURS	NATURE OF WORK
	Adjusting Welsbach Lamps Gratuitous Work
	House Piping and Hanging Fixtures House Fitting Expense
	Inspecting and Testing House Piping House Fitting Expense
	Installing and Connecting Gas Appliances Gas Appliances
	Leaks, Freeze-ups, Pumping Street Main Drips Complaint Expense
	New Services, No...St. Services
	Putting on Tips and Burners Gratuitous Work
	Reading and Verifying Indexes of Meters Office Salaries
	Repairing Services Repairs Services
	Setting and Removing Meters Setting and Removing Meters
	Setting, Removing or Repairing Stoves Gratuitous Work
	Setting, Removing and Repairing Gas Engines Gas Engine Expense
	Turning on and off Supply of Gas Setting and Removing Meters

APPROVED: ....Foreman

FORM 44—Labor Distribution Report

No.................................. ....COMPANY. "Distribution Gas."

Time of.. Occupation,...

Rate per.....................................$....................................... Month of...190...........

NATURE OF WORK									Total Hours	Total Amount to Each Account	CLASSIFICATION
Setting and Removing Meters											Sett. and Remov. Meters
Turning on or off Supply of Gas											" " "
Leaks, Freeze-ups, Pumping Street Main Drips,											Complaint Expense
Putting on Tips and Burners											Gratuitous Work
Setting, Removing or Repairing Stoves, Property of Consumer											" "
Adjusting Welsbach Lamps											" "
Testing and Adjusting Meters											Repairs Meters
Painting and Repairing Meters,											" "
New Service No. St.,											Services
Coating Service Pipe											"
Piping Houses and Hanging Fixtures											House Fitting Expense
Inspecting and Testing House Piping											" " "
Installing and Connecting Gas Appliances											Gas Appliances

FORM 45—Distribution Time Voucher

Reading and Verifying Indexes of Meters			Office Salaries
Repairing Mains,			Repairs Mains
Searching for Leaks in Mains			" "
Renewing, Enlarging or Repairing Services			Repairs Services
Care of Store Room Stock			Expense Store Room
Setting, Removing or Repairing Gas Engines			Gas Engine Expense
Caring for Horses, Vehicles and Stable			Expense Stable
Hauling Freight, etc.			" "
Attention to Outlying Holders			Expense Works
Excavating for Main on	St.,		in. Main
Laying Main on	St.,		in. "
Filling in on	St.,		in. "
Replacing Paving on	St.,		in. "
Carting Material to	St.,		in. "
		Form No. 18.	

Received of...Company,

CORRECT: { ....Supt. Amount of wages in full as above..dollars

....Foreman. ....190 ....

FORM 45—Continued

This pay roll gives the name, occupation, time due each workman, and a detailed classification of the various accounts among which this expense is pro-rated. When the pay roll is complete, the superintendent signs it and forwards it to the treasury department.

173. *Credit side of the cash book.*—An entry is then made upon the credit side of the cash book (Form 47). Here also will appear the sums paid out for purchase of materials and supplies, and for the general disbursements of the company, which we have considered in the first part of this chapter.

The purpose of the classification on the pay roll is to furnish the basis necessary for the proper charging to the various expense accounts, indicating a credit to the pay roll account. The credit to the pay roll account, in this instance, offsets the debit posted from the cash book at the time the money was drawn from the bank.

174. *Statement of profit and loss.*—At the end of each month the general ledger department prepares a statement of profits and loss, showing the results of the operation of the plant during the month (Form 48). This statement is prepared for the purpose of giving to the officers of the company a summary statement of the profit or loss to the company from its operation. For us, however, it has the advantage of showing the classifications of the accounts carried upon the general ledgers of the gas company. Each item represents a separate account on the general ledger.

175. *Construction of profit and loss account from trial balance.*—In order to fix in our memories the classifications of accounts and to understand the operation of a gas company's books we will take the following trial balance of a small company manufacturing water gas, and through it construct the profit and loss account:

Works { ....

Voucher No..

PAY ROLL

$..................................

....*to*..190

CLASSIFICATION

Expense Works,	....	....
Manufacturing Labor,	....	....
Purification Labor,	....	....
" Supplies,	....	....
Repairs Works General,	....	....
" Coal Gas,	....	....
" Water Gas,	....	....
Boiler Fuel Stock,	....	....
Enricher Coal Gas Stock,	....	....
Fuel Under Retorts Stock,	....	....
....	....	....
Generator Fuel Stock,	....	....
Gas Coal Stock,	....	....
Oil (Water Gas) Stock,	....	....
Ammoniacal Liquor Expense,	....	....
Coke Expense,	....	....
Tar Expense,	....	....
....	....	....
Complaint Expense,	....	....
Distribution Office Expense,	....	....
Gratuitous Work,	....	....
Repairs Mains,	....	....
" Services,	....	....
" Meters,	....	....
Setting and Removing Meters,	....	....
Street Mains Abandoned,	....	....
....	....	....
Expense Collection	....	....
" Office,	....	....
Office Salaries,	....	....
....	....	....
Accidents and Damages,	....	....
Expense Extraordinary,	....	....
....	....	....
Appliance Demonstrations,	....	....
Expense Soliciting,	....	....
Gas Appliances,	....	....
Gas Engine Expense,	....	....
House Fitting Expense,	....	....
....	....	....
....	....	....
....	....	....
....	....	....
....	....	....

Form 46—Pay Roll Report

PAY ROLL..

FROM..

No. Time Voucher.	Name	Occupation	Total Time	Rate Day	Amount	Expense Works	Manufg Labor	Purification Labor
	Checked by							

WE HEREBY CERTIFY that the time and rates allowed are correct, and that the sum of

FORM 46—Continued

....

TO..190

CLASSIFICATION

Purification Supplies	Repairs Works General	Repairs Works Coal Gas	Repairs Works Water Gas	Boiler Fuel Stock	Enricher Coal Gas Stock	Fuel Under Retorts Stock

....Dollars has been paid
100

Form 46—Continued

FROM..

No. Time Voucher	CLASSIFICATION— Generator Fuel Stock	Gas Coal Stock	Oil (W.G.) Stock	Ammoniacal Liquor Expense	Coke Expense	Tar Expense		Complaint Expense	Dist'n Office Expense	Gratuitous Work

to the employees as set forth above

....*Superintendent*

APPROVED { .... *Treasurer's*

FORM 46—Continued

....COMPANY

TO...190

Continued

Repairs Mains	Repairs Services	Repairs Meters	Setting and Removing Meters	Street Mains Abandoned		Expense Collection	Expense Office

....

....

Department ....

Form 46—Continued

DATE	Voucher Number	PAID TO	FOR
		Amounts Forwarded	
		Amounts Forward	

FORM 47—Credit Side of General Cash Book

CR.

ACCOUNT	Ledger Folio	AMOUNT	TOTAL

FORM 47—Continued

STATEMENT OF PROFIT AND LOSS

from...*to*..

(GAS)

FORM No..........

FORM 48—Profit and Loss Statement

INCOME	Am't Rec'd per M. Cubic Feet	..........Months Ending..........		
............Cubic Feet Gas Sold to General Consumers				
.... " " " Used for Sundry Purposes				
.... " " " Sold Street Lamps				
.... " " " " Private Lamps				
.... " " " Used at Works				
.... " " " " " Office				
....				
Less Discount				
Miscellaneous Sales				
Amount Forwarded				

FORM 48—Continued

CONTRA	Cost per M. cu. ft. Gas made	Cost per M. cu. ft. Gas sold	......Months Ending..............					
MANUFACTURING	.		..	...	..			
Manufacturing	.		..	...	..			
Boiler Fuel	.		..	...	..			
Enricher Coal Gas	.		..	...	..			
Expense Works	.		..	...	..			
Fuel Under Retorts	.		..	...	..			
Generator Fuel	.		..	...	..			
Gas Coal	.		..	...	..			
Manufacturing Labor	.		..	...	..			
Oil (Water Gas)	.		..	...	..			
Purification Labor	.		..	...	..			
Purification Supplies	.		..	...	..			
Repairs Works General	.		..	...	..			
Repairs Works Coal Gas	.		..	...	..			
Repairs Works Water Gas	.		..	...	..			
Water Tax	.		..	...	..			
	.		..	...	..			
	.		..	...	..			
Less Residuals	.		..	...	..	..	...	..
Leakage...............................cu. ft.	.							
@ = $	.							
	Cost per M. cu. ft. Gas sold							
DISTRIBUTION	.		..	...	..			
Complaint Expense	.		..	...	..			
Distribution Office Expense	.		..	...	..			
Gratuitous Work	.		..	...	..			
Repairs Mains	.		..	...	..			
Repairs Services	.		..	...	..			
Repairs Meters	.		..	...	..			
Setting and Removing Meters	.		..	...	..			
Street Mains Abandoned	.		..	...	..			
	.		..	...	..			
	.		..	...	..	..	...	..
Amount Forwarded	.					..	...	..

FORM 48—Continued

INCOME	Am't Rec'd per M. Cubic Feet	.........Months Ending.........		
Amount Brought Forward				
Total				

FORM 48—Continued

CONTRA	Cost per M. cu. ft. Gas made	Cost per M. cu. ft. Gas sold	............Months Ending............					
Amount Brought Forward								
COMMERCIAL EXPENSE	.		..	...	..			
Commercial Expense	.		..	...	..			
Expense Collection	.		..	...	..			
Expense Office	.		..	...	..			
Office Salaries	.		..	...	..			
	.	.	..	...	..	..	...	..
EXPENSE			..	...	..			
Accidents and Damages	.		..	...	..			
Association Meetings	.		..	...	..			
Expense General			..	...	..			
Expense Extraordinary			..	...	..			
Insurance	.		..	...	..			
Interest	.		..	...	..			
Litigation	.		..	...	..			
Salaries General	.		..	...	..			
Uncollectable Bills	.		..	...	..	..	...	..
NEW BUSINESS	.		..	...	..			
New Business	.		..	...	..			
Advertising	.		..	...	..			
Appliance Demonstrations	.		..	...	..			
Expense Soliciting	.		..	...	..			
Gas Appliances	.		..	...	..			
Gas Engine Expense	.		..	...	..			
House Fitting Expense	.		..	...	..			
	.	.	..	...	..	..	...	..
Taxes		.				..	...	..
Street Lamp Operating,		.				..	...	..
Operating Expenditures		.				..	...	..
Interest on Bonds		.				..	...	..
Total Expenses		.				..	...	..
Balance Net..............................		.				..	...	..
Total		.				..	...	..

FORM 48—Continued

FINAL TRIAL BALANCE

Ammoniacal Liquor				Capital Stock			
Coke				Bonds Payable			
Tar							
Store Room							
Stable							
Gas Stock				Accounts Payable			
				Bills Payable			
Boiler Fuel Stock				Deposits			
Generator Fuel Stock							
Gas Coal Stock				Accrued Taxes			
Fuel Under Retorts Stock				Accrued Interest			
Oil (Water Gas) Stock				Accrued Interest on Bonds			
Cash				Sales Suspense			
				Profit and Loss Year......			
				Profit and Loss			
Bills Receivable							
Gas Sales							
Prepayment Sales							
Sundry Sales							
City of............................							
Advance Taxes							
Advance Insurance							
Plant							
Real Estate							
Extension of Street Mains							
Street Main Improvement							
Extension & Improvement							
Street Lamp Extension							
Meters							
Services							

FORM 48—Continued

GAS ACCOUNT—CUBIC FEET

Water Gas Made	20,000,000	Cubic Feet
Coal Gas Made	10,000,000	" "
Total Gas Made	30,000,000	" "
Gas on Hand	500,000	" "
Total Gas to Account for	30,500,000	" "
Less Gas on Hand	400,000	" "
Gas Delivered to Mains	30,100,000	" "
Gas Sold	28,000,000	" "
Gas Used by Company	1,800,000	" "
Gas Unaccounted for	300,000	" "
Total Gas Accounted for	30,100,000	" "

PROPERTY ACCOUNTS

Accounts			Increase	Remarks
Real Estate				
Extension of Mains				
Street Main Improvement				
Extension & Improvement				
Street Lamp Extension				
Meters				
Services				
Total				
Plant				
Total				

Form 48—Continued

TRIAL BALANCE

	DR.	CR.
Manufacturing Labor	$ 5,400	
Boiler Fuel	3,200	
Generator Fuel	5,400	
Oil	126,000	
Purifiers	3,200	
Repair Works	2,600	
Expense Works	3,900	
Water Tax	1,500	
Insurance	300	
Taxes General	4,800	
Distribution Labor and Material	12,000	
Office Expenses	13,500	
Stable Expense	4,000	
Repairs Mains	1,800	
Repairs Meters	600	
Repairs Services	700	
Street Lighting	300	
Advertising	300	
Maintenance Arc Lamps	1,500	
Licenses	1,000	
Discounts	34,000	
General Expenses	5,000	
Sundry Debtors, Gas	40,000	
Sundry Debtor, Merchandise	10,000	
Cash	29,000	
Bond Interest	25,000	
Plant	1,055,600	
Capital Stock		500,000
Bonds		500,000
Accounts Payable		48,000
Gas Accounts		342,600
	$1,390,600	$1,390,600

The inventories of materials on hand are as follows:

Manufacturing Material	$20,000
Distribution Material	4,000

These are the only inventories of any description carried.

The following facts must also be taken into consideration:

Gas manufactured during the year	300,000,000	cu. ft.
Gas sold " " "	270,000,000	" "
Unaccounted for	30,000,000	" "

From this data we will now proceed to make up the following:

Manufacturing cost of gas sold.

Distribution cost of gas sold.

The income account or statement of operations.

Balance sheet.

The classification of the various accounts having been stated before we shall proceed with a minimum amount of explanation.

STATEMENT OF PROFIT AND LOSS

INCOME.

Gas Accounts		$342,600	
Less Discount			$342,600
Miscellaneous Sales			
Total Income			$342,600

CONTRA.

A. MANUFACTURING.

1. Boiler Fuel	$ 3,200	
2. Expense Works	3,900	
3. Generator Fuel	5,400	
4. Manufacturing Labor	5,400	
5. Oil (Water Gas)	126,000	
6. Purifiers	3,200	
7. Repairs General Works	2,600	
8. Water Tax	1,500	
	$151,200	
Less Inventory of Manufacturing Materials	20,000	
Manufacturing cost of 300,000,000 cu. ft. or 43.7 cents per 1000 ft.		$131,200

B. DISTRIBUTION.

1. Repairs, Mains	1,300
2. Repairs Services	700
3. Repairs Meters	600
4. Distribution Labor & Material	12,000
5. Licenses	1,000
6. Stable Expenses *	4,000
	20,000

Less Inventory of Distribution Material	$4,000	
Distribution cost of 270,000,000 cu. ft. or 5.96 cts. per 1000 ft.		$ 16,000
C. Commercial Expense.		
1. Office Expense		18,500
D. Expense.		
1. General Expense	5,000	
2. Insurance	300	5,300
E. New Business.		
1. Advertising New Business		300
F. Taxes.		
General Taxes		4,800
G. Street Lamp Operation.		
1. Street Lighting	300	
2. Maintenance of Arc Lamps	1,500	1,800
H. Bond Interest		25,000
I. Discounts		34,000
		282,000
Balance Net Profit		110,600
		$342,600

BALANCE SHEET.

Assets.

Cash	$ 29,000	
Inventory Manufacturing Material.................	20,000	
Inventory Distribution Material..................	4,000	
Sundry Debtors Gas...............................	40,000	
Sundry Debtors Merchandise.......................	10,000	
Plant	1,055,600	

Liabilities.

Capital Stock		$ 500,000
Bonds		500,000
Accounts Payable		48,000
Surplus		110,600
	$1,158,600	$1,158,600

The uniform system of accounts for gas companies adopted by the American Gas and Light Association in 1902 provides that "stable expenses" shall be closed monthly into the various accounts for which hauling was done during the month, proportioned on basis of number of hours teams were employed. To arrive at this, it is necessary for each driver to turn in a time card for each horse. There being nothing in the problem to indicate a basis for such proportionment, the total stable expense has been charged as a cost of distribution.

CHAPTER XVI

RAILROAD ACCOUNTING

176. *The railroad business.*—The administrative and accounting problems of a modern railroad system are stupendous. The business of a railroad, however, is one of the simplest and most easily understood forms of industrial activity. In the volume on INVESTMENT AND SPECULATION it was shown that a railroad makes its money by transporting passengers, freight, express and mail. In addition, it has the income from its investments and from miscellaneous sources.

177. *Sources of revenue.*—The Interstate Commerce Commission has established twenty-one distinct classifications under which the revenue of a railroad shall be subdivided. They are as follows:—

I. REVENUE FROM TRANSPORTATION—

1. Freight Revenue.
2. Passenger Revenue.
3. Excess Baggage Revenue.
4. Parlor and Chair Car Revenue.
5. Mail Revenue.
6. Express Revenue.
7. Milk Revenue (on Passenger Trains).
8. Other Passenger-Train Revenue.
9. Switching Revenue.
10. Special Service Train Revenue.
11. Miscellaneous Transportation Revenue.

II. REVENUE FROM OPERATIONS OTHER THAN TRANSPORTATION—

12. Station and Train Privileges.
13. Parcel-Room Receipts.
14. Storage-Freight.
15. Storage-Baggage.
16. Car Service.
17. Telegraph and Telephone Service.
18. Rents of Buildings and Other Property.
19. Miscellaneous.
20. Joint Facilities Revenue—Dr.
21. Joint Facilities Revenue—Cr.

178. *Charges for transporting passengers.*—The major portion of a railroad's revenue arises from the passenger business and from the handling of freight. A railroad company has many standards of charges for the transportation of passengers. There is a standard for transportation in one direction. There is a different standard when the passenger buys an excursion ticket, or a round trip ticket. The railroad also sells mileage books by which the rider is entitled to transportation over any part of the system up to a certain number of miles, usually one thousand, called for in the book. He can purchase a monthly ticket giving him the privilege of sixty rides between two stated stations during any calendar month, or he can purchase a hundred-trip ticket which gives him the right to that number of rides within a given period of time, usually one year. These are a few of the special rates named by the railroad; school tickets, workmen's tickets, clergymen's tickets, family tickets and dozens of others might be enumerated.

179. *Charges for transportation of freight.*—The diversity of charges for the transportation of freight is

even greater than that for passengers. Thousands of commodities are grouped into a few classes to each of which certain rates apply. This grouping is done in the freight classification. There are three of these classifications in force in the country. The "official classification" applies to all traffic between points east of the Mississippi and north of the Ohio and Potomac Rivers. This includes the Middle West, the Middle Atlantic and the New England States. South of the Ohio and East of the Mississippi, the "Southern classification" prevails, while the territory west of the Mississippi River is covered by the "Western classification." The problem is made even more complex because hundreds of articles have been taken out of the classification and made the subject of special or "commodity" rates.

180. *Complicated nature of accounting system.*—In addition to handling the problems arising from the immense volume of its transactions and the great number of stations along its lines the accounting organization must adjust itself to the complex operating organization of the railroad system. Let us take the Pennsylvania Railroad Company, or that portion of the system East of Pittsburgh and Erie, as an example. In 1908 this system carried 61,380,000 passengers or about 5,115,000 each month. It carried 182,500,000 tons of freight which, if the average shipment were one ton, would mean 15,000,000 shipments each month. The work of apportioning the revenue from freight earnings requires the constant service of two general auditors and a number of clerks.

The Pennsylvania system east of Pittsburgh and Erie is composed of the lines of 107 proprietary companies. These lines are held together in some cases by stock ownership and in others through leases. It is

necessary for the accounting department to apportion the revenue of the system among these companies. There are nearly 1,500 stations at which the company maintains agents. Every report made up by these agents records a shipment in which the proportion earned by each of these constituent companies may differ from that of every other shipment. It is necessary, therefore, that an apportionment of earnings be made for each shipment handled over the company's lines.

Finally it is necessary to remember that the Pennsylvania system has through billing arrangements for ordinary freight with a few "foreign" connecting lines, or the lines belonging to other systems. In the case of coal freight it has through billing arrangements with all connecting lines. This company also will sell through passenger tickets to almost any railroad station in the United States, Canada or Mexico. The revenue from these sources must be divided among the lines participating in the service.

The expenditures made by the railroad present another set of difficult accounting problems. The company must maintain a great number of agents and station employés. The operation of its trains requires many watchmen, signal men, engineers, firemen, conductors and brakemen. The upkeep of its roadway requires the employment of engineers, division foremen and section men. The operation and direction of the system is usually lodged in the general manager for the division, while superintendents operate each section of the road. The operation of the road requires a great quantity of supplies. These must be purchased, stored and distributed, and each step must be accounted for, from the time the order is placed until the material is actually used in the operation of the system or in mak-

ing repairs. Not only must these expenses be properly classified but they must be apportioned among the 117 companies or lines which are included in the system.

181. *Administrative organization.*—The first step in understanding the accounting system of a railroad is to become familiar with the administrative organization which directs its management. The number of departments varies considerably in the different systems throughout the country, the tendency being to increase their number. The Pennsylvania Railroad Company has fourteen general departments which are as follows: (1) General office, (2) treasury, (3) accounting, (4) freight, (5) passenger, (6) transportation, (7) purchasing, (8) real estate, (9) engineering, (10) legal, (11) insurance, (12) voluntary relief, (13) employés' saving fund, (14) pension. The last three have to do with the company's relations with its employés.

The duties of these various departments are not difficult to understand.

The freight department is under a freight traffic manager, who with his assistant officers, makes rates, and sends instructions to the agents. His assistants consist of a general freight agent, assistant general freight agent, freight claim agent, assistant freight claim agent, division freight agents (in different geographical districts), and a general coal freight agent. This department is represented in the general office by a vice-president (formerly the third and fifth vice-presidents).

The passenger department has a similar organization and similar duties in regard to serving the passenger traffic. It is represented by the same vice-president.

The transportation department has charge of the operation of trains, maintenance of equipment and

maintenance of way. For the purpose of efficient operation, the Pennsylvania system proper has been divided into five grand divisions (Western Pennsylvania, Eastern Pennsylvania, New Jersey, Erie, etc.), besides which there are the P. B. & W., the Northern Central and the West Jersey and Seashore railroads which are nominally distinct. Each is under a general superintendent of operation, and over all is a general manager. Each grand division is divided into subdivisions each under a divisional superintendent. There are nineteen of these. Then come the local divisions and branch lines. Besides the officers named, this department requires the services of a general superintendent of motive power, chief engineer of maintenance of way, superintendent of telegraph, resident manager of the New Jersey division, general agents, purchasing agent and real estate agent with their subordinates and a great number of employés.

It is unnecessary to dwell on the purchasing and treasury departments. The general department consists of the offices of the president, the secretary and the five vice-presidents. The other thirteen departments, including the accounting department, are divided among the vice-presidents, each of whom is expected to keep himself informed concerning his departments.

The accounting department is under the direction of a comptroller, assistant comptroller and a number of auditors. Until recently there were seven auditors, each of whom had charge of the auditing of a certain line of activities. These were:

1. Auditor of mdse. freight receipts.
2. Auditor of coal freight receipts.
3. Auditor of passenger freight receipts.

4. Auditor of miscellaneous receipts and agents accounts.
5. Auditor of disbursements.
6. Auditor of Empire line.
7. Auditor of Union line.

The last two are fast freight lines with a special organization which operates over the lines of a number of railroad systems.

182. *Classification of tickets.*—Having before us the general nature of the accounting problem of a railroad and the needs which must be satisfied, our next step is to study the way in which these requirements are met. This can best be accomplished by taking some one division of the railroad as an illustration and seeing exactly how its accounts are kept and the purposes which are served by each form. We will begin with the accounting of the passenger business.

The chief problem of accounting of the passenger business is concerned with the sales of tickets by ticket agents and cash collected by conductors. The tickets of a railroad are very much like postage stamps: they have a certain value because they give the bearer the right to certain transportation. It is necessary, therefore, that they be carefully accounted for.

There are four general kinds of tickets; viz.: (1) Local; (2) interdivisional; (3) interline foreign tickets; (4) interline foreign roads. Local tickets are those good only between points on the same grand division, namely, Eastern Pennsylvania division from Altoona to Philadelphia. Interdivisional tickets are those good from a point on one grand division to a point on another. Interline foreign tickets are those sold by the home company good from a point on its lines to a point on the lines of some foreign road. Interline foreign roads in-

clude tickets good between a point on a foreign road and a point on the home system's line, which have been sold by the former.

From another standpoint tickets may be classified as card, commutation and mileage. The card tickets are sub-classified into first class, excursion, clerical, etc., excursion tickets being further classified. Commutation tickets are classified into 60-trip monthly, 100-trip, employé's 100-trip, and many others.

Mileage tickets are important because they must be accounted for in a manner different from that employed in handling other forms. As a general proposition, all other passenger ticket revenue is counted on the basis of tickets sold each month (not tickets used by passengers). But for mileage books the method employed must be different, since some coupons may not be used for six months or a year, may be used on any part of the system and therefore may be either local or interdivisional, and, with interchangeable mileage books, may be used on foreign roads. As it cannot be known in advance how the books will be used the receipts from their sale are not counted in passenger revenue at once, but are carried to a reserve or suspense account. Coupons as collected are charged against this suspense account and credited to the passenger earnings of that grand division and subdivision or branch on which they are used.

188. *Ticket requisitions.*—When a station agent finds that his stock of any class of tickets is running low he fills out a requisition for the various kinds and amounts of tickets which he desires. The form of requisition for local tickets illustrates the general character of all these requisitions. It is shown in Form 49, page 252.

It is important to note in connection with the requisi-

tion for tickets that agents do not request any specified amount of tickets. The requisition is really a report of the number of tickets on hand. The passenger traffic manager reserves for himself the decision of the quantity of tickets which the agent of each particular station should have in stock. When the requisition is received this official or some responsible subordinate indicates the quantity of each kind of ticket which he thinks should be sent in order to give the agent a sufficient supply.

184. *Ticket invoices.*—Tickets which are sent to the agent are always accompanied by an invoice showing exactly what is being sent to him and, by inference, what he is held accountable for. Such an invoice is shown in Form 50, page 253.

It will be seen that this invoice contains a receipt for the tickets. This is signed by the agent and returned to the passenger department, and constitutes its receipt for the shipment. After the invoice has been prepared but before the tickets are sent they are charged to the agents by form and number in a ticket ledger kept by the auditor. A ticket ledger in use for foreign tickets is given in Form 51, pages 254–257.

185. *Agent's daily report.*—At the close of each day's business the agent makes a detailed report of the number of local tickets sold to each destination, classifying these as card, excursion, etc., giving the commencing and closing numbers of tickets sold of each series, the number sold, the rate, and the total amount of money received. A summary of the interdivisional and foreign ticket sales is also appended to the ticket report. Form 52, pages 258–270.

The purpose of the daily report is to enable the auditor's office to check up the tickets which it receives

D. T. A.—6-P. R. R. Division. 655. 4-6-07.

PENNSYLVANIA RAILROAD COMPANY.

EASTERN PENNSYLVANIA DIVISION.

..............................Station, ...190..........

REQUISITION FOR LOCAL TICKETS.

..............................*Agent.*

NOTICE.—Application for tickets must be forwarded fully FOUR WEEKS before the supply will be required and any EXTRAORDINARY DEMAND made known as EARLY AS POSSIBLE. Agents will be held STRICTLY ACCOUNTABLE should they permit their supply to become exhausted

☞ *Do not make requisition for tickets by Telegraph.*

Quantity Sold Last Three Months	Destination	Class of Tickets	Lowest Number on Hand	Highest Progressive Number on Hand	Quantity Forwarded	Pro. Numbers Forwarded	
						Lowest	Highest

☞This blank, *with three months sales, destination, class of tickets,* and columns of LOWEST and HIGHEST numbers on hand *properly filled in,* must be enclosed in envelope, *Form No.* 7, and forwarded to *Division Ticket Agent, Penna. R. R. Division, Broad Street Station, Philad'a.*

FORM 49—Local Tickets Requisition

G—301—A. P. R. 6½x12 5 8 1908

PENNSYLVANIA RAILROAD COMPANY.
EASTERN PENNA. DIVISION.

PASSENGER DEPARTMENT—GENERAL OFFICE.

Philadelphia,.................................190

INVOICE OF LOCAL TICKETS.

Furnished.., *Agent at*..*Station,*

On Requisition No...................................., *dated*.., 190

DESCRIPTION OF TICKETS	AGENT'S HIGHEST PROG. NUMBER	NUMBER FURNISHED	NUMBERS FURNISHED		
			SERIES	COMMENCING	CLOSING

Received the above-mentioned tickets this..........................*day of*.., 190 ,
and I certify that the progressive numbers and number furnished are correct.

....*Station,*..*Division,*............................*Agent,*

FORM 50—Ticket Invoice

Carefully examine the tickets enumerated on this invoice, and if any are missing, mutilated, duplicated, incorrectly or imperfectly printed, as to reading or numbers, or in any manner rendered unfit for sale; or if the reading on the tickets does not correspond in all respects with the description given on the invoice, *withhold your signature* until you have corresponded with the *Division Ticket Agent* and had the irregularity corrected. Agents on P. & E. R. R. Division, B. & A. V. Division, and N. C. Ry., will address the General Passenger Agent. Make *no endorsements* of any kind on invoices, except the ordinary check marks.

This invoice must be receipted by the Agent, not by a clerk or assistant, unless specially authorized, after which it is to be forwarded to Auditor of Passenger Receipts in envelope G—200—A. P. R.

D. T. A.—6-P. R. R. Division. 655. 4-6-07.

PENNSYLVANIA RAILROAD COMPANY.

EASTERN PENNSYLVANIA DIVISION.

....................Station, ...190..........

REQUISITION FOR LOCAL TICKETS.

....................Agent.

NOTICE.—Application for tickets must be forwarded fully FOUR WEEKS before the supply will be required and any EXTRAORDINARY DEMAND made known as EARLY AS POSSIBLE. Agents will be held STRICTLY ACCOUNTABLE should they permit their supply to become exhausted

☞ *Do not make requisition for tickets by Telegraph.*

Quantity Sold Last Three Months	Destination	Class of Tickets	Lowest Number on Hand	Highest Progressive Number on Hand	Quantity Forwarded	Pro. Numbers Forwarded	
						Lowest	Highest

☞This blank, *with three months sales, destination, class of tickets,* and columns of LOWEST and HIGHEST numbers on hand *properly filled in,* must be enclosed in envelope, *Form No.* 7, and forwarded to *Division Ticket Agent, Penna. R. R. Division, Broad Street Station, Philad'a.*

FORM 49—Local Tickets Requisition

G—301—A. P. R. 6½x12 5 8 1908

PENNSYLVANIA RAILROAD COMPANY.
EASTERN PENNA. DIVISION.

PASSENGER DEPARTMENT—GENERAL OFFICE.

Philadelphia,...................................190

INVOICE OF LOCAL TICKETS.

Furnished..., *Agent at*..*Station*,

On Requisition No...................................., *dated*.., 190

DESCRIPTION OF TICKETS	AGENT'S HIGHEST PROG. NUMBER	NUMBER FURNISHED	NUMBERS FURNISHED		
			SERIES	COMMENCING	CLOSING

Received the above-mentioned tickets this...........................*day of*.., 190 ,
and I certify that the progressive numbers and number furnished are correct.

....*Station*,..*Division*,.............................*Agent*,

FORM 50—Ticket Invoice

☞Carefully examine the tickets enumerated on this invoice, and if any are missing, mutilated, duplicated, incorrectly or imperfectly printed, as to reading or numbers, or in any manner rendered unfit for sale; or if the reading on the tickets does not correspond in all respects with the description given on the invoice, *withhold your signature* until you have corresponded with the *Division Ticket Agent* and had the irregularity corrected. Agents on P. & E. R. R. Division, B. & A. V. Division, and N. C. Ry., will address the General Passenger Agent. Make *no endorsements* of any kind on invoices, except the ordinary check marks.

☞This invoice must be receipted by the Agent, not by a clerk or assistant, unless specially authorized, after which it is to be forwarded to Auditor of Passenger Receipts in envelope G—200—A. P. R.

G—271—Foreign.—A. P. R.

8½ x 14. 10 16 1905. PENNSYLVANIA

RECORD OF FOREIGN TICKETS received and sold or forwarded by............

☞*Tickets received or sold will be entered in black ink. Those forwarded, in red ink. will be progressive,*

		Balance on hand January 1st,			TICKETS				
Form	Destination		Com. No.	Clos. No.	Date	Com. No.	Clos. No.	Date	Com. No.

FORM 51—Ticket Ledger

Form VII.

RAILROAD COMPANY.

....Agent at...Office No ....

Closing numbers of tickets received, on hand, or forwarded will be inclusive. Those sold unless marked inclusive.☞

RECEIVED BY AGENT

Clos. No.	Date	Com. No.	Clos. No.	Date	Com. No.	Clos. No.	Date	Com. No.	Clos. No.

FORM 51—Continued

G—271—Foreign—A. P. R.

8½ x 14.   10 16 1905.

PENNSYLVANIA

RECORD OF FOREIGN TICKETS received and sold or forwarded by............

Tickets received or sold will be entered in black ink. Those forwarded, in red ink.
will be progressive,

TICKETS SOLD OR

Jan.		Feb.		March		April		May		June		July	
Com.	Clos.	Com.	Clos.	Com.	Clos.	Com.	Clos.	Com.	Clos.	Com.	Clos.	Com.	Clos.

FORM 51—Continued

RAILROAD COMPANY.

....Agent at..Office No.......................

Closing numbers of tickets received, on hand or forwarded will be inclusive. Those sold unless marked inclusive. ☞

FORWARDED BY AGENT

Balance on hand, December 31st,

August		September		October		November		December				
Com.	Clos.	Com.	Clos.	Com.	Clos.	Com.	Clos.	Com.	Clos.		Com. No.	Clos. No.

FORM 51—Continued

Form G. G—251 a—A. P. R. S 70 14 x 17. 1 22 1906.

PENNSYLVANIA RAILROAD COMPANY

Pennsylvania Railroad Division

Daily Report of Passenger Tickets issued at.................................Station,.................................Division..........
on..........................day, the..........................day of..........................190 , by..........................Agent
Office opened for Train No............at............A. M. Date in Card Ticket Stamp changed after Train No............at............P. M.
Office closed after Train No............at............P. M. Date in Paper Ticket Stamp changed after Train No............at............P. M.

	Destination	Serial	CARD TICKETS					Serial	EXCURSION TICKETS				
			Commencing Number	Closing Number	No. Sold	Rate	Amount		Commencing Number	Closing Number	No. Sold	Rate	Amount
	1 Philadelphia, " Half, 7 Fifty-second St., " Half, 1508 Wynnefield Ave., 1509 Bala, " Half, 1510 Cynwyd,												
	1511 ... Laurel Hill, " Half, 1513 Manayunk, 1515 Shawmont, 1517 Lafayette, 1519 Spring Mill, 1520 Conshohocken												
	" Half, 1524 Norristown, " Half, 1527 Port Indian, 1529 Betzwood, 1530 Protectory, " Half,												
			Amount carried forward,						Amount carried forward,				

Form 52—Agent's Daily Ticket Report

	Destination	Serial	CARD TICKETS					Serial	EXCURSION TICKETS				
			Commencing Number	Closing Number	No. Sold	Rate	Amount		Commencing Number	Closing Number	No. Sold	Rate	Amount
			Amount brought forward,						Amount brought forward,				
	1532 Perkiomen,												
	" Half,												
	1533 Pt. Providence,												
	1534 Mt. Clare												
	1535 Phoenixville,												
	1506 Nutts Avenue,												
	1505 Harveysville,												
	1504 Pickering												
	1503 Aldham,												
	1502 Devault,												
	1501½ Sidley,												
	1501 Bacton,												
	1500 Swedesford Rd.,												
	1537 Cromby,												
	1539 Spring City,												
	1542 Parker Ford,												
	1544 Frick's Lock,												
	1546 Pottstown,												
	1550 Douglassville,												
	1553 Monocacy,												
	1555 Birdsboro,												
	" Half,												
	1556 Clingan,												
	1557 Robeson,												
	1558 Gibraltar,												
	" Half,												
	1559 Seyfert,												
	1560 Ridgewood,												
	1564 Orrton,												
	1565 Reading,												
			Amount carried forward,						Amount carried forward,				

FORM 52—Continued

	Serial	CARD TICKETS					Serial	EXCURSION TICKETS				
Destination		Commencing Number	Closing Number	No. Sold	Rate	Amount		Commencing Number	Closing Number	No. Sold	Rate	Amount
		Amount brought forward,						Amount brought forward,				
1567 Exeter Street,												
1568 Muhlenberg,												
1570 Temple,												
1571 Ontelaunee,												
1573 Leesport,												
" Half,												
1575 Mohrsville,												
1577 Shoemakersv'le,												
1580 Hamburg,												
1590 Schuylkill Hn.,												
1599 Pottsville,												
10 Overbrook,												
" Half,												
12 Merion,												
15 Narberth,												
18 Wynnewood,												
21 Ardmore,												
" Half,												
24 Haverford,												
" Half,												
27 Bryn Mawr,												
" Half,												
30 Rosemont,												
" Half,												
33 Villa Nova,												
" Half,												
37 Radnor,												
" Half,												
		Amount carried forward,						Amount carried forward,				

FORM 52—Continued

Destination	Serial	CARD TICKETS					Serial	EXCURSION TICKETS				
		Commencing Number	Closing Number	No. Sold	Rate	Amount		Commencing Number	Closing Number	No. Sold	Rate	Amount
		Amount brought forward,						Amount brought forward,				
39 St. David's,												
40 Wayne,												
" Half,												
43 Strafford,												
44 Devon,												
46 Berwyn,												
" Half,												
48 Daylesford,												
50 Paoli,												
52 Green Tree,												
54 Malvern,												
" Half,												
57 Fraser,												
1286 Morstein,												
" Half,												
1289 Kirkland,												
1292 Green Hill,												
1295 Fern Hill,												
1299 West Chester,												
59 Glen Loch,												
61 Ship Road,												
62 Whiteland,												
64 Whitford,												
66 Bradford Hills,												
67 Woodbine,												
70 Downingtown,												
" Half,												
		Amount carried forward,						Amount carried forward,				

FORM 52—Continued

Destination	Serial	CARD TICKETS					Serial	EXCURSION TICKETS				
		Commencing Number	Closing Number	No. Sold	Rate	Amount		Commencing Number	Closing Number	No. Sold	Rate	Amount
		Amount brought forward,						Amount brought forward,				
403 Dowlin, 405 Dorlan, 408 Lyndell, 410 Cornog, 414 Glen Moore, 426 Honeybrook, 428 Churcht'n Rd.,												
429 Beartown, 430 Cedar Lane, 431 East Earl, 433 New Holland, 436 Groffdale, 438 Bareville, 440 Leola,												
442 Hellers, 444 Hartman, 445 Greenfield, 72 Gallagherville, 74 Thorndale, 76 Caln, 78 Coatesville, " Half,												
81 Pomeroy, 971 Avondale, 83 Parkesburg, " Half, 84 Lenover, 85 Atglen,												
		Amount carried forward,						Amount carried forward,				

FORM 52—Continued

Destination	Serial	CARD TICKETS					Serial	EXCURSION TICKETS				
		Commencing Number	Closing Number	No. Sold	Rate	Amount		Commencing Number	Closing Number	No. Sold	Rate	Amount
		Amount brought forward						Amount brought forward,				
87 Christiana, 89 Gap, 91 Kinzer, 93 Leaman Place, 95 Gordonville, 96 Ronk,												
97 Bird-in-Hand, 98 Witmer, 100 Lancaster, " Half, 999 Quarryville,												
108 Landisville, " Half, 110 Salunga, 110 Mount Joy, " Half, 114 Florin, 116 Rheems,												
118 Elizabethtown, 120 Conewago, 124 Rohrerstown, 127 Mountville, 128 Glen Manor, 130 Columbia, " Half,												
		Amount carried forward,						Amount carried forward				

Form 52—Continued

Destination	Serial	CARD TICKETS					Serial	EXCURSION TICKETS				
		Commencing Number	Closing Number	No. Sold	Rate	Amount		Commencing Number	Closing Number	No. Sold	Rate	Amount
		Amount brought forward,						Amount brought forward,				
133 Chickies,												
134 Watts,												
137 Marietta,												
140 Shock's Mills,												
145 Bainbridge,												
" Half,												
145 Collins,												
147 Falmouth,												
151 Branch Int.,												
152 Middletown,												
" Half,												
155 Highspire,												
157 Steelton,												
160 Harrisburg,												
" Half,												
162 Maclay Street,												
164 Lucknow,												
165 Rockville,												
169 Marysville,												
" Half,												
172 Perdix,												
174 Cove,												
176 Cove Forge,												
178 Duncannon,												
" Half,												
180 Juniata Bridge,												
182 Aqueduct,												
183 Losh's run,												
184 Iroquois,												
		Amount carried forward,						Amount carried forward,				

FORM 52—Continued

Destination	Serial	CARD TICKETS					Serial	EXCURSION TICKETS				
		Commencing Number	Closing Number	No. Sold	Rate	Amount		Commencing Number	Closing Number	No. Sold	Rate	Amount
		Amount bro	ught for	ward,				Amount bro	ught for	ward,		
185 Bailey, 188 Newport, " Half, 191 Millerstown, 193 Thompsontown, 197 Mexico, 200 Port Royal,												
205 Mifflin, 208 Lewistown Jc., 216 McVeytown, 222 Newton Hamil'n 224 Mt. Union, " Half, 226 Mapleton,												
228 Mill Creek, " Half, 230 Ardenheim, 232 Huntingdon, 235 Petersburg, " Half, 238 Barree,												
240 Spruce Creek, 242 Union Fur., 246 Tryone, " Half, 569 Bellefonte, 611 Osceola Mills, 622 Philipsburg,												
		Amount	carried fo	rward,				Amount	carried fo	rward,		

FORM 52—Continued

Destination	Serial	CARD TICKETS Commencing Number	Closing Number	No. Sold	Rate	Amount	Serial	EXCURSION TICKETS Commencing Number	Closing Number	No. Sold	Rate	Amount
		Amount brought forward,						Amount brought forward,				
640 Clearfield, 643 Curwensville, 253 Bellwood, 260 Altoona, " Half, 658 Hollidaysburg, 691 Williamsburg,												
696 Mount Etna, 698 Water Street, 699 Alexandria, 272 Lilly, 290 Johnstown, 745 Indiana,												
323 Latrobe, 1135 Connellsville, 1155 Uniontown, 334 Greensburg, 359 Wilmerding, 368 Braddock,												
388 East Liberty, 400 Pittsburgh, " Half, 1360 West Elisabeth												
		Amount carried forward,						Amount carried forward,				

FORM 52—Continued

Destination	Card Tickets: Serial	Card Tickets: Commencing Number	Card Tickets: Closing Number	Card Tickets: No. Sold	Card Tickets: Rate	Card Tickets: Amount	Excursion Tickets: Serial	Excursion Tickets: Commencing Number	Excursion Tickets: Closing Number	Excursion Tickets: No. Sold	Excursion Tickets: Rate	Excursion Tickets: Amount
		Amount brought forward,						Amount brought forward,				
1 Philadelphia (Spl. Exc.), 108 Landisville " 222 New'n Hamil. (C.Meet.Ex.) 244 Birmingham (Sum.Exc.) 569 Bellefonte " 640 Clearfield "												
260 Altoona, " " (Spl. Exc.), 270 Cresson (Sum. Exc.), 1719 Ebensburg " " (Spl. Sum. Ex.), 1751 Wildwood Spgs.(Sum.Ex.) " (Spl. Sum. Ex.),												
		Total Regular Card Ticket Sales,						Total Excursion Ticket Sales,				

FORM 52—Continued

Destination	Serial	CLERICAL TICKETS					Serial	LIM. CON. TRAIN TICKETS				
		Commencing Number	Closing Number	No. Sold	Rate	Amount		Commencing Number	Closing Number	No. Sold	Rate	Amount
1 Philadelphia, 1555 Birdsboro, 70 Downingtown, 83 Parkesburg,												
100 Lancaster, 108 Landisville, 112 Mount Joy, 118 Elizabethtown, 120 Conewago, 130 Columbia, 137 Marietta,												
152 Middletown, 160 Harrisburg, 169 Marysville, 178 Duncannon, 188 Newport, 224 Mt. Union, 246 Tyrone, 260 Altoona, 400 Pittsburgh,												
Phila. to Pittsburgh (Con. Train),												
		Total Clerical Ticket Sales,						Total Lim. Con. Train Ticket Sales,				

FORM 52—Continued

PACKAGE OR STRIP TICKETS

Destination	Serial	Com. No.	Clos. No.	No. Sold	Rate	Amount
1 Philadelphia,						
1513 Manayunk,						
1514 Cinnaminson,						
1515 Shawmont,						
1517 Lafayette,						
1519 Spring Mill,						
1520 Conshohocken,						
1521 Ivy Rock,						
1522 Earnest,						
1524 Norristown,						
1525 Franklin Ave.,						
1527 Port Indian,						
1529 Betzwood,						
1530 Protectory,						
1532 Perkiomen,						
1533 Pt. Providence,						
1534 Mont Clare,						
1536 Phoenixville,						
1537 Cromby,						
1539 Spring City,						
1542 Parker Ford,						
1544 Frick's Lock,						
1545 Kenilworth,						
1546 Pottstown,						
1555 Birdsboro,						
1557 Robeson,						
1558 Gibraltar,						
1559 Seyfert,						
		Package Sales carried forward,				

PACKAGE OR STRIP TICKETS—Continued

Destination	Serial	Com. No.	Clos. No.	No. Sold	Rate	Amount
		Package Sales brought forward,				
15 Narberth,						
18 Wynnewood,						
21 Ardmore,						
24 Haverford,						
27 Bryn Mawr,						
30 Rosemont,						
33 Villa Nova,						
37 Radnor,						
39 St. David's,						
40 Wayne,						
43 Strafford,						
44 Devon,						
46 Berwyn,						
50 Paoli,						
52 Green Tree,						
54 Malvern,						
57 Fraser,						
1286 Morstein,						
1289 Kirkland,						
1292 Green Hill,						
1295 Fern Hill,						
1299 West Chester,						
59 Glen Loch,						
61 Ship Road,						
62 Whiteland,						
64 Whitford,						
66 Bradford Hills,						
67 Woodbine,						
70 Downingtown,						
78 Coatesville,						
		Total Package Ticket Sales,				
	Total Regular Local Ticket Sales,					

FORM 52—Continued

SUMMARY OF REPORT	Serial	Com. No.	Clos. No.	AMOUNT
Total Regular Local Ticket Sales,				
Whole to Blank " "				
Half " " " "				
Con. Train to Blank " "				
" (Blk. Train), " "				
Spl. Lim. to Blank, " "				
2 Day Exc. to Blank " "				
" " Half to Blank " "				
6 Day Exc. (from 52d St.) to Blank " "				
Spl. Exc. to Blank " "				
Exc. (Blk. Lim.) to Blank " "				
Summer Exc. to Blank " "				
6 Day Exc. (from Phila.) " "				
Total carried forward,				

SUMMARY—(CONTINUED)	Serial	Com. No.	Clos. No.	AMOUNT
Total brought forward,				
Clerical to Blank Ticket Sales,				
Spl. Yellow " " " "				
Spl. Party Exc. " " "				
Commutation Ticket Sales,				
Amount of Local Sales,				
for error on report for				
Amount of Foreign Sales,				
Total amount of this report,				
Cash unremitted from previous day,				
......balance from previous month, per Audit Letter,				
Total amount chargeable,				
Value of Duplex memoranda redeemed,				
Amount remitted this date,				
Cash on hand not remitted,				

FORM 52—Continued

from the train conductors at the close of their runs. As tickets are turned in by the conductors they are assorted according to issuing stations, arranged numerically in each series, and compared with the agent's report. At the end of the month from these reports the commencing and closing numbers of the tickets of each series sold or returned by each agent are entered upon another page of the ticket ledger. Thus every ticket issued to an agent must be accounted for, and the tickets act as a check upon the agent's report.

186. *Agent's monthly report.*—At the end of each month the agent furnishes a monthly report of both local and foreign interline tickets, showing in detail the total business handled by his station during the month. The form of the report for regular passenger ticket sales is given in Form 53, pages 272–282.

It will be seen that this form furnishes the commencing and closing numbers of tickets from a particular station to the other stations on the system. It also shows the number of whole and half tickets sold, the rate of fare and the total amount in dollars and cents received from the sale of each particular class of ticket. This monthly report is prepared from a book called the "daily exhibit of passenger business" which is kept by each agent in his office. The form of the monthly report for foreign tickets is much simpler. Form 54.

187. *Apportionment of earnings.*—The greater portion of the work of the auditor of passenger receipts consists in the analysis of these monthly reports, and the proper division of earnings between the various companies involved. The sales between local points on the same line require no division, for they properly belong to one company. Inter-divisional sales, that is, sales to a point on another division, where the two divisions are

881 8½ x 14. 1-29-1907.

A. D. 7490

(Formerly G—254—Philadelphia Division and Branches—A. P. R.)

PENNSYLVANIA RAILROAD COMPANY.
EASTERN PENNSYLVANIA DIVISION.
MONTHLY REPORT OF LOCAL PASSENGER TICKET SALES.

By.., Agent at.., during.., 190

NOTE.—Agent will be particular to enter on this report the Commencing and Closing Numbers for the month of All Local stocks on hand (including broken numbers) whether sales are made or not.

FIRST CLASS

Destination	Route	Serial	Printed Destination		Number Sold			Rate	Amount		Explanations and Numbers from Blank Stocks
			Commenc'g Number	Closing Number	Whole	Half	Total		Dollars	Cts.	
1	2	3	4	5	6	7	8	9	10		11
Philad'a (Broad St.), West Philadelphia, 52d Street, Overbrook, Merion, Narberth, Wynnewood, etc.											
Totals,											

FORM 53—Agent's Monthly Report

PRINTED CARD HALVES.
(Include Value With Whole Stocks.)

Destination	Route	Serial	Commenc'g Number	Closing Number	Number Sold	Explanations and Spoiled Tickets Numbers
1	2	3	4	5	6	7
Philadelphia,						
Total,						

TWO DAY EXCURSION.

Destination	Route	Serial	Printed Destination		Number Sold			Rate	Amount		Explanations and Numbers from Blank Stocks
			Commenc'g Number	Closing Number	Whole	Half	Total		Dollars	Cts.	
1	2	3	4	5	6	7	8	9	10		11
Philad'a (Broad St.), West Philadelphia, Fifty-second St, Overbrook, Merion, Narberth, Wynnewood, etc.											
Totals,											

FORM 53—Continued

TWO DAY EXCURSION.

PRINTED HALVES.

(Include Value With Whole Stocks.)

Destination	Route	Serial	Commenc'g Number	Closing Number	Number Sold	Explanations and Spoiled Tickets Numbers
1	2	3	4	5	6	7
Philadelphia,						
Total,						

BLANK BOOKS.

(Include Value With Printed Stocks.)

	Serial	Commencing Number	Closing Number	Number Sold	Explanations and Spoiled Ticket Numbers.
Whole,					
Half,					

Form 53—Continued

EXCURSION.

Destination	Route	Serial	Printed Destination		Number Sold			Rate	Amount		Explanations and Numbers From Blank Stocks
			Commenc'g Number	Closing Number	Whole	Half	Total		Dollars	Cts.	
1	2	3	4	5	6	7	8	9	10		11
Philadelphia (6 Day)											
Lancaster, "											
Columbia, "											
Harrisburg, etc. "											
Totals,											

SPECIAL PARTY EXCURSION.

From	To	Route	Number Sold	Passengers			Rate	Amount		Explanations and Ticket Numbers
				Whole	Half	Total		Dollars	Cts.	
1	2	3	4	5	6	7	8	9		10
	Totals,									

	Serial	Commencing Number	Closing Number	Number Sold	Local	Foreign	Explanations and Spoiled Ticket Numbers
Blank to Blank,							
" "							

Reported Foreign..

Form 53—Continued

COMMUTATION (STOCK).

Class	Destination	Route	Serial	Printed Destination		Number Sold	Rate		Amount		Explanations and Numbers From Blank Stocks
				Commenc'g Number	Closing Number		Dolls.	Cts.	Dolls.	Cts.	
1	2	3	4	5	6	7	8		9		10
46 Trip,	Philadelphia, etc.										
	Totals,										
50 Trip,	Philadelphia, etc.										
	Totals,										
54 Trip,											
	Totals,										
54 Trip Emp.,											
	Totals,										
60 Trip,	Philadelphia, etc.										
	Totals,										
60 Trip Emp.,											
	Totals,										

FORM 53—Continued

100 Ride,	Philadelphia, West Chester,										
	Totals,										
100 Ride Emp.,	Philadelphia, etc.										
	Totals,										
180 Trip,	Philadelphia, etc.										
	Totals,										
1000 Mile,	P. R. R.,						20	00			
	Int-C.,						25	00			
	Totals,										
	Grand Totals,										

BLANK STOCKS.
(Include Value With Printed Stocks.)

	Serial	Commencing Number	Closing Number	Number Sold	Explanations and Spoiled Ticket Numbers
46 Trip and Blank,					
50 Trip and Blank,					
54 Trip and Blank,					
60 Trip and Blank,					
100 Ride and Blank,					
180 Trip and Blank,					

FORM 53—Continued

COMMUTATION (SPECIAL REQUISITION).

Class	Serial	Number	Name of Commuter	Date of Sale by Agent	Between		Rate	
							Dollars	Cts.
1	2	3	4	5	6	7	8	
............Trip								
						Total,		

TEN STRIP.

Destination	Route	Serial	Printed Destination		Number Sold	Rate	Amount		Explanations and Numbers From Blank Stocks
			Commenc'g Number	Closing Number			Dollars	Cts.	
1	2	3	4	5	6	7	8		9
Philad'a (Broad St.),									
Overbrook,						$1.00			
Merion,						1.08			
Narberth,						1.26			
Wynnewood, Etc.						1.35			
Totals,									

FORM 53—Continued

CLERICAL.

Destination ☞ Enter destinations in same *order* as printed in *Tariff*	Route	Serial	Printed Destination		Number Sold	Rate	Amount		Explanations and Numbers From Blank Stocks
			Commenc'g Number	Closing Number			Dollars	Cts.	
1	2	3	4	5	6	7	8		9
Philadelphia,									
Lancaster, etc.									
Totals,									

BLANK BOOKS.

(Include Value With Printed Stocks.)

	Serial	Commencing Number	Closing Number	Number Sold	Local	Foreign	Explanations and Spoiled Ticket Numbers
Blank and Blank,							

Reported Foreign, ...

FORM 53—Continued

SPECIAL YELLOW.

From	To	Route	Number Sold	Passengers			Rate	Amount		Explanations and Ticket Numbers	Order Numbers
				Whole	Half	Total		Dollars	Cts.		
1	2	3	4	5	6	7	8	9		10	11
☛ Enter the Numbers of Military, Standing and Time Orders and Circulars in Column 11. Forward Other Orders in Envelope G—634—Locals.											
	Totals,										

	Serial	Commencing Number	Closing Number	Number Sold	Local	Foreign	Explanations and Spoiled Ticket Numbers
Blank to Blank,							
" "							

Reported Foreign,..

FORM 53—Continued

SUMMARY OF LOCAL PASSENGER RECEIPTS.

To be Filled in by Agent	Amount		Account as Audited	Amount	
	Dollars	Cts.		Dollars	Cts.
First Class Sales,			First Class Sales,		
2 Day Excursion Sales,			2 Day Excursion Sales,		
Excursion "			Excursion "		
Special Party "			Special Party "		
Commutation " (Stock),			Commutation " (Stock),		
" " (Special Requisition),			" " (Special Requisition),		
Ten Strip "			Ten Strip "		
Clerical "			Clerical "		
Special Yellow "			Special Yellow "		
Miscellaneous "			Miscellaneous "		
Total Local Sales,			Total Local Sales,		

Difference between accounts, $ to be to Agent.

Number of Tickets,

Number of Passengers,

FORM 53—Continued

MISCELLANEOUS

For Reporting All Local Passenger Ticket Sales not Otherwise Provided For

☛Report no Excursion Sales on This Page.

Class	Destination	Route	Serial	Printed Destination		Number Sold			Rate	Amount		Explanations and Numbers from Blank Stocks
				Commenc'g Number	Closing Number	Whole	Half	Total		Dollars	Cts.	
1	2	3	4	5	6	7	8	9	10	11		12
Sp'l Lim., (Note Route In Col. 3).												
Cont. Train,	Totals,											

BLANK BOOKS.

(Include Value Wish Printed Stocks.)

	Serial	Commencing Number	Closing Number	Number Sold	Local	Foreign	Explanations and Spoiled Ticket Numbers
Special Limited,							
" "							
Continuous Train,							
" "							
" " Blank Train,							

Reported Foreign, } ....

....

....

Form 53—Continued

G—259—A. P. R.

802. 12-20 06 C. I.
8½x14.

PENNSYLVANIA RAILROAD COMPANY

Philadelphia, Baltimore & Washington Railroad Company
Northern Central Railway Company
West Jersey & Seashore Railroad Company

EASTERN PENNSYLVANIA DIV.

MONTHLY REPORT OF FOREIGN TICKET SALES

By.., *Agent at*..., *Office No*..............................., *for*............................, 190

Explanations, Blank Book and Half-Ticket Numbers	Destination	Form	Commencing Number	Closing Number	Number Sold					Rate	Amount	
					Unlim.	Lim.	2d C.	Exc.	Spl.		Dolls.	Cts.
1	2	3	4	5	6	7	8	9	10	11	12	
				Totals,								

Form 54—Agent's Monthly Report (Foreign Tickets)

G—259—A. P. R.

PENNSYLVANIA RAILROAD COMPANY

Philadelphia, Baltimore & Washington Railroad Company
Northern Central Railway Company
West Jersey & Seashore Railroad Company

Monthly Report

of

FOREIGN TICKET SALES

at..Station,

....Division,

for..,190

I certify the within to be a correct statement of tickets sold for the time specified.

....
Agent

Tickets checked..

Com. Nos. examined..

Orders checked..

Rates examined..

Extensions and additions examined..

Auditor's checks examined..

Spoiled tickets examined..

Cut tickets examined..

Summary examined..

AUDITOR'S MEMORANDA

Dr.		Cr.	
Dolls.	Cts.	Dolls.	Cts.

FORM 54—Continued

the properties of separate subsidiary companies, require an apportionment of earnings between these corporations. In addition, the sales of interline foreign tickets or tickets from one point on the system to a point on some other railroad's line must be divided among the companies involved.

The method of making the subdivision is interesting. The division between two railroad systems is made upon the basis of the rates of fare of the home and foreign lines involved. These have been fixed in advance and filed with the Interstate Commerce Commission. The auditor's office, therefore, is charged with the duty of seeing that the division is made according to this lawful rate. After the apportionment has been determined, the proper entries are made on an apportionment sheet which is simply a wide sheet containing columns for each road involved; and the proper amount to be credited to each, including, of course, the local lines, is entered in the appropriate column. These accounts are carried until the end of the month when a report is made to each company involved showing the amount of tickets which have been sold over its lines. The statement, in other words, gives a summary of the amount owed by the railroad to its neighbor. This report is shown in Form 55, pages 286–287.

188. *Apportionment of revenue.*—The apportionment of revenue upon the home system varies considerably according to the peculiarities of each station. Generally, however, the apportionment is made upon the mileage basis with "constructive mileage" for extraordinary service, such as is furnished by expensive bridges over large rivers, and charges in terminals in big cities. When the auditor's office has completed this work of apportioning the receipts for the sale of tickets

Association Standard No. 1

A. P. R.—90

822—9-29-06
$8\frac{1}{2}$x14

THE PENNSYLVANIA RAILROAD COMPANY
OFFICE OF THE AUDITOR OF PASSENGER RECEIPTS
Broad Street Station, Philadelphia

REPORT OF INTERLINE TICKET SALES

On Account of..*Company,*

Month of..............................19

A. J. GILLINGHAM,
AUDITOR OF PASSENGER RECEIPTS

From		To	Form	Ticket Nos.		Class & No. Sold				Through Rate	Proportion	Amount	Authorities and Occasions for Special Rates
No.	Station			Com'cing	Closing Inc.	1st	2nd or Mixed	R Trip or Exc'n	Em'gt				
													1
													2
													3
													4
													5
													6
													7
													8
													9
													10
													11
													12
													13
													14
													15

Form 55—Monthly Report of Interline Tickets

A. P. R.—90-a

822—9-29-06
8½x14

Page................*of*..*Company.* *(Continued.)*

From		To	Form	Ticket Nos.		Class & No. Sold				Through Rate	Proportion	Amount	Authorities and Occasions for Special Rates
No.	Station			Com'cing	Closing Inc.	1st	2nd or Mixed	R Trip or Exc'n	Em'gt				
		Brought forward											
													1
													2
													3
													4
													5
													6
													7
													8
													9
													10
													11
													12
													13
													14
													15
													16
													17
													18
													19
													20
													21
													22
													23

Form 55—Continued

throughout a month, and has totaled the sales of all agents upon the system during the period, it is ready to draft the journal entries to record the month's business in the general books of the company. This brings us for the first time to the consideration of these books, in which a vast amount of detail business is recorded in summary.

A railroad company in reality has a very simple system of general accounts. Its principal books are the general journal, cash book and general ledger. From the agents' monthly reports a summary of the total ticket sales of all agents on the system is entered in the journal. The transaction can be illustrated by the following journal entry:

Passenger agents, Dr ....
To Passenger earnings...............

By this entry the passenger agents have been charged with the total amount of sales, while "passenger earnings" have been credited. This, however, presents a fictitious view of the system's earnings, for the total amounts of these sales should not properly be credited as earnings. The proportion owing to foreign roads and to constituent companies forms the basis for a second journal entry, as follows:

Passenger earnings, Dr. ....
To Foreign roads ....
Constituent companies............

The effect of this entry is to set forth on the books of the railroad company the actual amount of its passenger earnings for the month, and to credit the accounts of the foreign roads and its own constituent companies for their respective proportion as shown by the apportionment sheets.

189. *Conductors' cash collections.*—The second source of passenger earnings is the collections made by conductors upon trains from passengers who neglected to purchase tickets at stations. The majority of roads have adopted the system of furnishing conductors with duplex cash fare slips. These are prepared in two portions folded together. The conductor makes punch marks on the forms opposite the stations between which the passenger has purchased transportation. He adds to the regular fare between these points a specified sum, frequently 10 cents, which represents the redeemable value of the portion of the duplex slip given to the passenger.

The passenger can usually be depended upon to redeem his portion of the slip in order to secure the excess sum charged by the company. These slips are redeemed by any ticket agent of the company and are turned in by him as part of his cash. The other portion which the conductor handles is sent to the auditor; thus a check can be kept upon the honesty of the conductor.

The traffic department has men constantly on the road whose duty it is to pay cash fares, especially from stations where no agents are maintained, and where no excess is charged and no slip issued to the passenger, to check up the honesty of the conductors. The journal entries for receipts from conductors are handled in the manner already described in the case of the passenger agents. Each conductor at the end of his run furnishes a report to the auditor showing in detail the tickets taken up and the cash fares collected by him. (See Form 56, pages 290–291.)

190. *Tickets turned in by conductors.*—The rules of practically every company require that the conductor shall promptly punch all tickets as they are taken up.

PENNSYLVANIA RAILROAD COMPANY

PHILADELPHIA, BALTIMORE & WASHINGTON R. R. CO   NORTHERN CENTRAL RY. CO.   WEST JERSEY & SEASHORE R. R. CO.

Number of Pay and Free Passengers carried on..

Division, Train No..............................on the..day of...190

Run of Train	Pay Passengers Carried		Pay Passengers To or From Points Named			Free Passengers			
	Class	Number	Point	From	To	Kind of Pass	Annual and Term	Trip	
From	Through		Philadelphia			Employee			
To	Way		Harrisburg			Legislative			
			Pittsburgh			Other than Employee and Legislative			
	Totals		Jersey City						
			Camden						
			Baltimore Washington Buffalo Williamsport Atlantic City						

FORM 56—Conductor's Report

A. D. 7658

8-3-07

8x10½

PENNSYLVANIA RAILROAD COMPANY

PHILADELPHIA, BALTIMORE & WASHINGTON R. R. CO. NORTHERN CENTRAL RY CO. WEST JERSEY & SEASHORE R. R. CO.

Date of Report.. 190

Conductor's Report of Train No..................*on*..................................*Division of the*..................
General Division, which left..................*at*..................*M., on*..................*day, the*..................
day of.................., 190.................., *and arrived at*..................*at*..................*M.*..................*day,*
showing the Cash collected, Duplex Memoranda and Tickets issued, Pullman and Special Cars hauled, Notations relative to Special Occurrences, &c.

Passengers Carried in Pullman and Special Cars					Kind of Ticket or Memoranda	Commencing No.	Closing No.	No. Issued	From	To	Fares	Rate	Amount	
Name or Number of Car	Run of Car		Passengers										Dolls.	Cts.
	From	To	Pay	Free										
	SLEEPING	CARS			Duplex Mem. Form Train Excursion Form Mil. Exch. Tkts. Form Exch. E-1, Train Checks Form									
	PARLOR	CARS			Extra Fare Tickets { L. 1 P, L. 2 P, E. F. 4757, E. F. 4758, Rebate Order L 19, P Half Tickets Form L									
	SPECIAL	CARS												

NOTATIONS:

TOTAL,

Rates, extensions, additions, &c., carefully examined and found correct.

....
Ticket Receiver.

Per..

The above is a correct report of the Duplex Memoranda and Excursion and other Tickets issued and Cash collected by me on train stated, with place and actual time of departure and arrival.

....

Conductor using Punch No..................

Design of Punch.

FORM 56—Continued

This is for the purpose of preventing collusion between the conductors and ticket agents, and the resale of the same tickets. The conductor turns in the tickets which he has taken up at the time he turns in his report. The auditor's office checks up these return tickets by numbers with the agent's report of tickets sold. If every ticket were turned in it would thus be possible to have an accurate check upon both agents and conductors, but many tickets are either lost or mislaid, are redeemed for cash at one of the company's offices or never presented for transportation. The result is that this comparison can never be quite accurate.

The cash from passenger sales is not usually kept separate from the cash from all other sources coming through the agent's hands. We will take this up after we have studied freight accounting.

CHAPTER XVII

RAILROAD ACCOUNTING (*Continued*)

191. *Distinction between freight and passenger accounting.*—The principles of freight accounting are similar to those of passenger accounting, but the details of the system are somewhat more complex. One radical distinction between the two systems must be kept constantly in mind: in passenger accounting the agent issuing the ticket is responsible for the collection of the proper sum of money; in freight accounting this responsibility rests on the agent at the destination of the shipment.

When freight is offered for shipment at a railroad station, the agent gives to the shipper a bill of lading, which is simply a receipt for certain freight and an agreement that this freight will be delivered in good condition at a specified destination. The accounting department has nothing to do with this bill of lading.

192. *The way bill.*—The accounting begins with the "way bill" which accompanies a shipment of freight or serves to identify it and direct its transmission from the place of shipment to its destination. The way bill also states the amount of transportation charges, and really furnishes the basis for the entire accounting of the freight department. The form of way bill differs considerably for various classes of shipments, but the method of handling them is identical.

The way bill is prepared in triplicate. One copy is

sent by the agent to the auditor. Another is retained by the agent at the issuing station as evidence that the shipment has been received, properly billed and presumably forwarded by him. The third is sent in an envelope with the freight to the agent at the receiving station.

The way bill contains a list of the articles in each car, their destination and the freight charges against them. The advance charges are those of connecting railway lines from which the freight may have been received at a junction, and which are "advanced" to the connecting line by the agent at the junction or re-billing point. The total charges are usually to be collected from the consignee or receiver of the freight. A column is provided for cases where the consignor or shipper has prepaid the charges.

193. *Agent's report of way bills made.*—At the close of each day the agent makes up his "daily report of way bills made," which is a summary of the way bills forwarded from his station for that date (Form 57). At the same time he makes up his "daily report of way bills received," which gives the same information for all shipments of freight which have come within his jurisdiction on that date. The form of this report is very similar to that of way bills made.

Every way bill is thus reported twice to the auditor, once in the "way bills made" report of the forwarding agent, and again in the "way bills received" report of the agent at the destination. By this means the agents' accounts are checked up and a record is kept of the freight shipped over the company's lines.

194. *Methods of way bill accounting.*—There are two methods of accounting for way bills, one of which is on the "received" basis. Under this arrangement

G—12-a—A. F. R.

PENNSYLVANIA RA

Philadelphia, Baltimore &
West Jersey & Sea
Northern Central

DAILY REPORT OF

At...Station,

No. of Way-Bill	From	To	Kind of Freight

FORM 57—Daily Report of Way Bills

ILROAD COMPANY.

S 44 8½x11½. 12 17 1904.

Washington Railroad Company.
shore Railroad Company.
Railway Company.

WAY-BILLS MADE

....190

Local or Foreign	Pounds	Freight Charges	Advances	Prepaid	To Be Collected

....Agent.

FORM 57—Continued

G—12-a—A. F. R.

DAILY REPORT

of

WAY-BILLS MADE

at

....Station,

....

....190

Instructions to Agents.

1. A report on this form must be forwarded daily to the Auditor of Freight Receipts, and must include all way-bills made during the day, the totals being entered on the report in the order of numbers.

2. A legible impression or a written copy (as instructed) of each way-bill must be enclosed with this report in the envelope provided for that purpose, the way-bills to be arranged in the order in which they are entered on the report.

3. When more than one sheet is required for a day's business, each sheet should be footed separately and a recapitulation made on the last sheet (except where a separate sheet is used for the recapitulation) showing grand totals for the day.

4. When there are two or more stations of the same name on the system, the point to which billing is made should be definitely located by giving the name of the State—for example, Middletown, Pa.; Middletown, Del.; Milford, N. J.; Milford, Del.; also the names of the various stations in large cities should be given in full—for example, Pittsburgh Duquesne, Pittsburgh South Side, instead of simply "Pittsburgh," and Pier 1, New York, Piers 4 and 5, New York, 37th Street, New York, instead of simply "New York."

Form 57—Continued

agents enclose their reports of freight received with the way bills received up to and including the last day of each calendar month. Shipments which have been made but which have not reached their destination are accounted for under this system in the business of the following month. The other method is on the "forwarded" basis. Under this system agents are required to hold open their freight abstract reports for a number of days after the last day of the month in order to include all way bills issued during the preceding month. Where this arrangement is followed each month's business is a separate and complete unit as regards earnings.

195. *Comparison of way bills.*—The office of the auditor of freight receipts is charged with the duty of comparing the reports of way bills made with the reports of way bills received, and discovering and correcting any discrepancy which may be found. As copies of way bills come in, they are assorted and turned over to clerks whose duty it is to verify the charges made by the agent, and the correctness of the totals. The way bills are then filed. At the same time, another set of clerks will check off in the column on the extreme right the daily report of way bills made in the "record of freight transactions" book. (Form 58, page 299.)

When the reports of way bills received come in, these clerks will check off in the column on the extreme right of the page those shipments which are reported as having been delivered. The book is intended to give the road a summary record of shipments which have not been accounted for, so that all freight may be properly delivered.

196. *Volume of transactions handled.*—The extent of the work of freight accounting can be seen from this one operation. A single line is devoted to each way

FROM...To...

	Waybill Numbers	Pounds	Freight Charges	Advances	Prepaid		

FORM 58—Record of Freight Transactions

bill, and there must be at least one page for each pair of stations between which freight has been carried. For the 1,500 stations of the Pennsylvania Railroad Company there is required over 1,124,000 pages for each month in the year. To this must be added pages for stations on foreign connecting lines with which this system has through billing arrangements.

In consequence of this enormous amount of work, there are many volumes of the record of freight transactions, and it is necessary to subdivide the books. Some books contain a record of nothing but "inter-line" freight or, in other words, freight passing over two or three grand divisions of the system. Some deal with freight interchanged with foreign connecting lines; some with that which is purely local in character; and some with that carried upon fast freight lines. A large number of volumes is required for each class of records. The Pennsylvania Railroad, for example, has nearly 500 books dealing exclusively with inter-line freight. The clerks having charge of these books are required to foot up each page at the end of the month, thereby securing the total "movement of freight" between each two stations covered by the record. A considerable proportion of the clerical force in the auditor's department is concerned with the preparation of freight traffic statistics. This, however, is not really accounting work and we need spend no time upon it.

197. *Agents' monthly freight report.*—A railroad company is not satisfied with the simple daily reports of the agents showing the business done at their stations. As in the case of the passenger business, they are required to turn in a monthly report of freight business. This report is shown in Form 59, pages 301–305.

G—2—A. F. R.

PENNSYLVANIA RAIL

Philadelphia, Baltimore & Washington Railroad Company.

Northern Central

DAILY EXHIBIT OF BUSINESS

Agents are required to remit to the TREASURER all moneys received by them Advances or Back Charges on Freight Forwarded.

Date	Chargeable to Agent on Account of Freight				
	Freight to be Collected	Prepaid on Freight Forwarded	Total Amount Chargeable	Cash Prepaid and Collected	Amount of of Bills Uncollected
Balance from last Month					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
Errors					
WAY-BILLS received since the 1st, as per extra reports, 1					
2					
3					
4					
5					
Total					

FORM 59—Freight Agent's Monthly Report

ROAD COMPANY.
West Jersey & Seashore Railroad Company.
Railway Company.

For Month of.......................................190 at............................Station.

on account of the Company, deducting only the amount paid for Commissions,

Date	Remittances and Advances on Account of Freight					
	Remittances to Treasurer on Acct. of Freight, etc.	Advances on Freight Forwarded Charged on Way-bills	Total Remittances and Advances	Cash on Hand not Remitted		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

Form 59—Continued

PENNSYLVANIA RAILROAD COMPANY.
Philadelphia, Baltimore & Washington Railroad Company.
West Jersey & Seashore Railroad Company.
Northern Central Railway Company.

REPORT OF FREIGHT AGENT at .... Station, to the Auditor of Freight Receipts, for the Month of 190

Freight to be Collected, ...	....	....
Prepaid on Freight Forwarded, ...	....	....
	....	....
Less Advances on Freight Forwarded, ...	....	....
Amount due for this month, ...	....	....
..................Errors in previous Report, ...	....	....
	....	....
Balance due from last month, ...	....	....
Total, ...	....	....
Less Remittances for the month, ...	....	....
Balance due Company, ...	....	....

I HEREBY CERTIFY that this Report contains a full and true statement of all amounts chargeable to this Station on Merchandise Freight Account, of all Advances or Back Charges paid on such Freight to be forwarded, and of all Remittances made to the Treasurer on Account of Merchandise Freight during the month of 190

.... Station.

Date of Report 190

.... Agent.

FORM 59—Continued

The Statement below is to be filled in by the AUDITOR OF FREIGHT RECEIPTS, not by Agent.

STATEMENT OF ACCOUNT AS CORRECTED BY AUDITOR OF FREIGHT RECEIPTS.

Freight to be Collected, ...		
Prepaid on Freight Forwarded, ...		
Less Advances on Freight Forwarded, ...		
Amount due for this month, ...		
.............................Errors in previous report, ...		
Balance due from last month, ...		
Total, ...		
Less Remittances for the month, ...		
Balance due Company, ...		

FORM 59—Continued

G—2—A. F. R.

MONTHLY REPORT

of

FREIGHT AGENT

at

.... **Station,**

to

AUDITOR OF FREIGHT RECEIPTS,

for

Month of..**190**

This Report must be forwarded to the AUDITOR OF FREIGHT RECEIPTS promptly after the close of business on the seventh day of each month, and must represent the business of the preceding month.

It must be signed by the Agent personally, not by his clerk or any other person.

For all corrections made or received by Agents to and including the seventh day of the month, on way-bills of the previous month, corresponding changes must be made in the station records, and the corrected daily totals carried to the Monthly Reports.

845 14 x 17. 1 27 1905.

Form 59—Continued

The various columns are self-explanatory, except those on the bottom of the second page. The line labeled "Errors" is intended as a means by which the agent can provide for corrections, or any mistakes or oversights which have been discovered by the auditor's office in either the making out of way bills and charging the proper freight, or in the recording of these bills on his daily sheet. Whenever any error is discovered, the agent is promptly notified by railroad mail service, in order that it can be checked up before the goods are delivered. The last few lines, headed "Way bills received since the first as per extra reports," are intended to enable the agent to show upon his monthly exhibit the business which he has done during the month but which in reality belongs to the preceding month. This is, of course, necessary on the freight forwarded basis, which has already been described. From this monthly report the entries in the general books are made. The journal entry necessary to place upon the books the earnings from freight transportation during the month is as follows:

Freight agents, Dr ....
To Freight earnings ....

In the same manner as in the passenger department apportionment of inter-line or foreign freight is made. The entries in the case of freight being:

Freight earnings, Dr ....
To Foreign roads, freight accounts....
The accounts of various constituent companies ....

198. *Cash receipts of agents and conductors.*—The agent is required to make two daily cash reports.

A. D. 8400 1397 8 26 1907

PENNSYLVANIA RAILROAD COMPANY
Philadelphia, Baltimore & Washington Railroad Company
Northern Central Railway Company
West Jersey & Seashore Railroad Company

DAILY CASH EXHIBIT

Date 190

.... Station

.... Division

Balance from last report			....	......
Collections this day			....	......
Total			....	......
DEDUCT				
Prepaid at Junctions and Advances settled	....	......		
Refunds paid	....	......		
Credit letters	....	......		
"Duplex" redeemed	....	......	....	......
Net			....	......
Remitted on account of month of			....	......
Balance on hand			....	......

.... Agent

THIS MUST NOT BE ENCLOSED
IN ENVELOPE

FORM 60—Daily Cash Report

The first (Form 60) goes to the auditor's department. This contains the same information as furnished to the treasurer to whom the money actually goes. (Form 61.)

In most cases agents are required to remit the amounts of their reports each day to the treasurer. This is done by train in the case of way stations located where no banking facilities are available.. Otherwise the agent deposits the money in a local bank, the procedure being as follows: He makes out a deposit slip in the usual manner and also a duplicate slip which states that he has on that day deposited a certain sum of money with the specified bank. Both slips are sent with the deposit to the bank. The bank stamps its receipt upon the duplicate slip and sends it to the treasurer. This official, after entering the amount in his cash book, sends it to the comptroller who enters it in his cash account. The comptroller's account acts as a check upon the treasurer's account. The comptroller then sends the bank slip to the auditor, whose duty it is to compare the slip with the agent's daily cash exhibit, and finally to enter the amount to the credit of the agent's account.

The cash turned in by train conductors is handled in a manner similar to the foregoing.

199. *Agents' accounts.*—The duty of keeping the accounts of the various agents devolves upon the auditor. The agent is charged each month with the total amount of way bills received and with the total of tickets sold. He is credited with all sums remitted by him. The balance represents the amount which he should have on hand or which would be outstanding in the case of those few shippers to whom credit has been given.

T. D. 53.

PENNSYLVANIA RAILROAD COMPANY.

Philadelphia, Baltimore & Washington Railroad Company.
Northern Central Railway Company.
West Jersey & Seashore Railroad Company.

AGENT'S REPORT

TO

TREASURER.

....Station,

.... Division,

...., 190

Remitted on Account of

AGENTS AND CONDUCTORS.

$.... ....

For Month of..

....
Agent.

NOTE.—Agents will be particular to state the MONTH in which they will claim credit for Remittances on Monthly Reports to Auditors.

248 7x8½. 2 13 1905.

FORM 61—Agent's Report to Treasurer

Vouchers, checks and drafts payable to order of the Company or the Treasurer - - - - -	$................................
Cash - - - - - -	$................................
Total - - - -	$................................

Form 61—Continued

CHAPTER XVIII

RAILROAD ACCOUNTING (*Concluded*)

200. *Accounting for disbursements.*—The principles of accounting employed for freight and passenger revenue described in the preceding chapters apply also to the various other classes of revenue of a railroad. For this reason we shall not study these in detail, but pass on to the accounting for disbursements. Here we are dealing either with capital expenditures or disbursements made for operation.

Each road used to have its own method of dividing these disbursements and of apportioning the various amounts between capital and expenditure. This situation, however, has been entirely changed through the recent orders of the Interstate Commerce Commission in compliance with the Hepburn rate law of 1906 which gave to the Commission the power to prescribe uniform systems of accounting. The Commission has clearly defined the various items which should be included under expenses of operation and capital expenditures.

201. *General accounts for operating expenses.*—The operating expenses constitute the major portions of the road's disbursements, and the Commission has established five general accounts under which they should be grouped, as follows:

I. Maintenance of Way and Structures.
II. Maintenance of Equipment.
III. Traffic Expenses.
IV. Transportation Expenses.
V. General Expenses.

The purpose of this classification is not so much to insure that each expense shall be put in its proper account as it is to avoid the evils of over-capitalization by charging to the capital account expenses which do not properly belong under that heading.

202. *Subdivision of general accounts.*—The Commission has subdivided the main general accounts into a number of "primary accounts." The prescribed grouping is as follows:

I. MAINTENANCE OF WAY AND STRUCTURES—

1. Superintendence.
2. Ballast.
3. Ties.
4. Rails.
5. Other Track Material.
6. Roadway and Track.
7. Removal of Snow, Sand, and Ice.
8. Tunnels.
9. Bridges, Trestles, and Culverts.
10. Over and Under Grade Crossings.
11. Grade Crossings, Fences, Cattle Guards, Signs.
12. Snow and Sand Fences and Snowsheds.
13. Signals and Interlocking Plants.
14. Telegraph and Telephone Lines.
15. Electric Power Transmission.
16. Buildings, Fixtures, and Grounds.
17. Docks and Wharves.
18. Roadway Tools and Supplies.
19. Injuries to Persons.
20. Stationery and Printing.
21. Other Expenses.
22. Maintaining Joint Tracks, Yards, and Other Facilities—Dr.
23. Maintaining Joint Tracks, Yards, and Other Facilities—Cr.

II. MAINTENANCE OF EQUIPMENT—

24. Superintendence.
25. Steam Locomotives—Repairs.
26. Steam Locomotives—Renewals.
27. Steam Locomotives—Depreciation.
28. Electric Locomotives—Repairs.
29. Electric Locomotives—Renewals.
30. Electric Locomotives—Depreciation.
31. Passenger-train Cars—Repairs.
32. Passenger-train Cars—Renewals.
33. Passenger-train Cars—Depreciation.
34. Freight-train Cars—Repairs.
35. Freight-train Cars—Renewals.
36. Freight-train Cars—Depreciation.
37. Electric Equipment of Cars—Repairs.
38. Electric Equipment of Cars—Renewals.
39. Electric Equipment of Cars—Depreciation.
40. Floating Equipment—Repairs.
41. Floating Equipment—Renewals.
42. Floating Equipment—Depreciation.
43. Work Equipment—Repairs.
44. Work Equipment—Renewals.
45. Work Equipment—Depreciation.
46. Shop Machinery and Tools.
47. Power Plant Equipment.
48. Injuries to Persons.
49. Stationery and Printing.
50. Other Expenses.
51. Maintaining Joint Equipment at Terminals—Dr.
52. Maintaining Joint Equipment at Terminals—Cr.

III. TRAFFIC EXPENSES—

53. Superintendence.
54. Outside Agencies.
55. Advertising.
56. Traffic Associations.
57. Fast Freight Lines.

58. Industrial and Immigration Bureaus.
59. Stationery and Printing.
60. Other Expenses.

IV. TRANSPORTATION EXPENSES—

61. Superintendence.
62. Dispatching Trains.
63. Station Employés.
64. Weighing and Car-Service Associations.
65. Coal and Ore Docks.
66. Station Supplies and Expenses.
67. Yardmasters and their Clerks.
68. Yard Conductors and Brakemen.
69. Yard Switch and Signal Tenders.
70. Yard Supplies and Expenses.
71. Yard Engineers.
72. Enginehouse Expenses—Yard.
73. Fuel for Yard Locomotives.
74. Water for Yard Locomotives.
75. Lubricants for Yard Locomotives.
76. Other Supplies for Yard Locomotives.
77. Operating Joint Yards and Terminals—Dr.
78. Operating Joint Yards and Terminals—Cr.
79. Motormen.
80. Road Enginemen.
81. Enginehouse Expenses—Road.
82. Fuel for Road Locomotives.
83. Water for Road Locomotives.
84. Lubricants for Road Locomotives.
85. Other Supplies for Road Locomotives.
86. Operating Power Plants.
87. Purchased Power.
88. Road Trainmen.
89. Train Supplies and Expenses.
90. Interlockers and Block and Other Signals—Operation.
91. Crossing Flagmen and Gatemen.

92. Drawbridge Operation.
93. Clearing Wrecks.
94. Telegraph and Telephone—Operation.
95. Operating Floating Equipment.
96. Express Service.
97. Stationery and Printing.
98. Other Expenses.
99. Loss and Damage—Freight.
100. Loss and Damage.
101. Damage to Property.
102. Damage to Stock on Right of Way.
103. Injuries to Persons.
104. Operating Joint Tracks and Facilities—Dr.
105. Operating Joint Tracks and Facilities—Cr.

V. GENERAL EXPENSES—

106. Salaries and Expenses of General Officers.
107. Salaries and Expenses of Clerks and Attendants.
108. General Office Supplies and Expenses.
109. Law Expenses.
110. Insurance.
111. Relief Department Expenses.
112. Pensions.
113. Stationery and Printing.
114. Other Expenses.
115. General Administration Joint Tracks, Yards and Terminals—Dr.
116. General Administration Joint Tracks, Yards, and Terminals—Cr.

203. *Classification of the capital account.*—The Commission has established three general capital accounts. They are as follows:

I. Road.
II. Equipment.
III. General Expenditures.

Each of these general accounts is composed of a number of primary accounts, as follows:

I. ROAD—

1. Engineering.
2. Right of Way and Station Grounds.
3. Real Estate.
4. Grading.
5. Tunnels.
6. Bridges, Trestles, and Culverts.
7. Ties.
8. Rails.
9. Frogs and Switches.
10. Tracks.
11. Ballast.
12. Track Laying and Surfacing.
13. Roadway Tools.
14. Fencing Right of Way.
15. Crossings and Signs.
16. Interlocking and Other Signal Apparatus.
17. Telegraph and Telephone Lines.
18. Station Buildings and Fixtures.
19. General Office Buildings and Fixtures.
20. Shops, Enginehouses, and Turntables.
21. Shop Machinery and Tools.
22. Water Stations.
23. Fuel Stations.
24. Grain Elevators.
25. Storage Warehouses.
26. Dock and Wharf Property.
27. Electric-Light Plants.
28. Electric-Power Plants.
29. Electric-Power Transmission.
30. Gas-Producing Plants.
31. Miscellaneous Structures.
32. Transportation of Men and Material.
33. Rent of Equipment.

34. Repairs of Equipment.
35. Earnings and Operating Expenses during Construction.
36. Cost of Road Purchased.

II. EQUIPMENT—

37. Steam Locomotives.
38. Electric Locomotives.
39. Passenger-Train Cars.
40. Freight-Train Cars.
41. Work Equipment.
42. Floating Equipment.

III. GENERAL EXPENDITURES—

43. Law Expenses.
44. Stationery and Printing.
45. Insurance.
46. Taxes.
47. Interest and Commissions.
48. Other Expenditures.

204. *Unusual costs.*—That there can be no doubt as to the charges to capital accounts, the Commission has covered all unusual costs with the following rule:

"Where the consideration to the transaction shown in any entry is anything other than money, the actual consideration must be shown in the entry, and the actual cash value thereof shown in the values columns."

205. *Voucher payments.*—A system of recording expenditures which has made great headway in modern business is that known as the "voucher system." The use of vouchers and vouched pay rolls in making disbursements has become universal with railroad companies. Vouchers are drawn up to represent all supply bills, all balances due to foreign roads, etc.; vouched pay rolls are the basis for the payment of all salaries

and wages. We shall deal first with the method of vouching supply bills.

We have already seen that one of the administrative departments of a railroad company is that of the purchasing agent. All purchases are made on order from this department. The goods purchased are delivered at some designated point along the lines of the company, but all invoices for these goods are sent directly to the purchasing agent.

With one operation of the typewriter, there is made out (1) a voucher, (2) a certified copy of the bill, (3) a duplicate, and (4) a triplicate. (Form 62, pages 319–321.)

206. *Method of making voucher payments.*—The "voucher" and the "certified copy" are retained temporarily by the purchasing agent, the duplicate and triplicate are sent to the general superintendent of the grand division for which the goods were purchased. He forwards the duplicate to the consignee of the goods and the latter compares it with the actual goods received, O. K.'s it and returns it to the general superintendent who forwards it to the purchasing agent. The general superintendent retains the triplicate in his own files.

The purchasing agent then sends the "certified copy" with the "voucher" to the auditor of disbursements, who checks additions, extensions and by whom approved. If correct he appends his own signature. It is then entered in a voucher register which is ruled to show —

Number	Distribution to
Name of Payee	Maintenance of Way
Total amount	Maintenance of Equipment
	Transportation Expenses, etc.

A. D. 80-A

S 170 7x8½. 9 18 1906

THE. PENNSYLVANIA RAILROAD COMPANY, Voucher No.

United Railroads of New Jersey Division, Sent 190

To

Mem. No................................

Chargeable to... Address: Dr.

....

Entered in month of 190

190			

I certify that the above account is correct; that the items therein specified were duly authorized and contracted for on favorable terms, and were necessary for the use and benefit of the Company.

....

Approved for Voucher: *Superintendent*...*Division.*

....

General Superintendent.

FORM 62—Certified Copy and Voucher

S 170 7⅛x8½. 9-18-1906.

A. D. 80-A. NEW JERSEY DIVISION No.

THE PENNSYLVANIA RAILROAD COMPANY To

Mem. No. Dr.

Address:

Entered in month of..

190		Dollars	Cts.

I certify that the amount of this voucher is the total of an original account, authorized and approved by the proper officer and filed in the office of the Auditor of Disbursements; that the same has been examined, found correct, and the voucher registered:

....

Auditor of Disbursements.

Approved for payment:

....

Comptroller.

NOTICE—Proper endorsement on the reverse of this voucher will be conclusive evidence of the payment of the above stated accounts.

FORM 62—Continued

Endorsements here

No.........................

Philadelphia, Pa..

THE PENNSYLVANIA RAILROAD COMPANY

Pay to the order of...$..............................

....Dollars

in full settlement of the within accounts.

THE PENNSYLVANIA RAILROAD COMPANY,

THIS VOUCHER-CHECK WILL BE PAID BY THE
PHILADELPHIA NATIONAL BANK
THROUGH THE PHILADELPHIA CLEARING HOUSE

....
for Treasurer.

FORM 62—Continued

The "voucher" is then sent to the comptroller to be approved for payment, whence it is returned to the auditor of disbursements, who forwards it to the office where the bill originated, to be delivered to the consignor of the goods. The comptroller lists such vouchers on an adding machine and credits "audited vouchers" account in the general ledger for their total each day. The reverse side of the "voucher" constitutes a check or order drawn by the treasurer in favor of the consignor for the amount of the bill. The payee endorses this check and deposits it in his own bank, whence it comes eventually to the company's bank. When the check has been returned in the usual way to the office of the treasurer, it is turned over to the office of the auditor of disbursements. This office enters the date of receipt in the "voucher register," and the voucher itself with the payee's endorsement constitutes the payee's receipt for the money.

This is the course of procedure for an ordinary purchase. In the case of materials and supplies, where a number of purchases are made from the same house in a month, the procedure is varied to a certain extent. Instead of vouching and approving each bill separately one voucher is drawn to cover all the bills from the same house for the month.

At the end of the month, the voucher account in the general ledger (kept by the comptroller) is verified by abstracting, on an adding machine, the amounts of all vouchers in the voucher register which are not marked "paid."

207. *General superintendent's roadway and bridge material report.*—Many supplies are not purchased for immediate use, but to keep up the stock of materials at various points along the company's lines. As these

materials are needed they are requisitioned out of the storehouses.

At the end of each month, the general superintendent of the grand division makes out and sends to the auditor of disbursements a "roadway and bridge material report." The object of this report is to account for the expenditure, not of money, but of materials from stock. In this report the uses of materials are classified according to the five general divisions of operating expenses. They are also distributed among such "open accounts" as may be affected in those cases where the expenditures are not for maintenance, or cannot as yet be definitely located, such as:—(1) construction materials; (2) materials for Altoona machine shops, etc.

This roadway and bridge materials reports shows these classifications of material expenditures not only for the grand division as a whole, but, by columnarizing the report, for each subdivision and branch of the grand division as well.

208. *Railroad pay rolls.*—The basis upon which employés are paid is the monthly pay rolls. Officers who have direct charge of all employment, subject, however, to the approval of officers higher up, draw up the pay rolls for the employés under them, setting forth the time, rate and amount of pay for each.

These pay rolls are drawn up in five classes, corresponding to the five general classes of operating expenses. Thus we have a "maintenance of way and structures pay roll," "maintenance of equipment pay roll," etc., from each grand division and subdivision and branch.

These pay rolls are signed, certifying as to their correctness, by the employing officer, approved by the superintendent of the subdivision or branch and also

by the general superintendent of the grand division. The auditor of disbursements checks the extensions, signatures of approval, perhaps compares a few items with the corresponding items of the pay roll of the preceding month to see that the rates of pay correspond. He then signs the pay roll and sends it to the comptroller, who approves it for payment and returns it to the auditor of disbursements.

Where possible all payments are made by checks, which are made out from the audited pay roll. The pay roll, or a copy thereof, together with a book of checks is sent to the employing officer who distributes the checks, obtains the signatures or marks of the employés on the pay roll, or duplicate, and returns it to the auditor's office.

The checks as drawn and sent out are credited to a temporary account called "pay roll checks account" by the treasurer. This account is later debited and cleared as the endorsed and canceled checks come back through the bank. The canceled checks are then turned over to the auditor of disbursements, who classifies them by pay rolls, compares them with the stubs of the check book, and cancels the numbers on the stubs. At the close of the month the unchecked stubs, representing outstanding checks, are proved by the balance of the "pay rolls checks" account.

The pay rolls themselves contain no classification of expenses except as indicated in the five general classifications already referred to. Even here, however, the classification may be wrong, for certain items contained in the "maintenance of way pay roll" may later be charged to betterments and additions. For the purpose of obtaining a detailed and final classification of such expenses for labor, there is a system of pay roll

reports, which follow a few days after the pay rolls themselves.

209. *Pay roll reports.*—The purpose of the pay roll reports is to analyze the expenses represented in the pay rolls, according to the five general classes of operating expenses. In addition there is an extensive subclassification representing the primary accounts, such as "superintendence," "tie-renewals," "rail-renewals" and the like, under each general class. Wages are, so far as possible, classified as "passenger expenses" and "freight expenses." This can be done only with those employés who are engaged exclusively in connection with one or the other of the two classes of traffic. Those not directly connected with one or the other are later divided, in the auditor's office, on a more or less arbitrary or semi-scientific basis.

This analysis is carried out by the local or divisional superintendents, who are in a better position to know what each man has been doing rather than the auditor. It should be remembered that the pay roll expenses, as well as the "roadway and bridge material" expenses, are already classified by grand divisions and sub-divisions of the system, hence the auditor's task is not one of classification and division as is the case with the revenue auditors, but of compilation.

210. *Statistical ledgers.*—The pay roll reports are compiled in statistical ledgers, of which there is one for each grand division. The "roadway and bridge materials" reports are treated in a similar manner. In the case of ordinary purchase bills, the analysis contained on the face of the "voucher" is also compiled in these ledgers.

Each double page of one of these statistical ledgers represents a single primary account, such as "mainte-

nance of way and structures-superintendence." Each page is divided into columns, one for each subdivision and branch of the grand division. There is also a total column, which applies to the grand division as a whole.

By condensation and recapitulation a total is taken from each page. The first effect of this is to show a summary of the classified operating expenses for each grand division, subdivision and branch. Eventually there is drawn off a report to the comptroller showing merely the totals of each of the five general classes of operating expenses for each division and branch. This report is copied into the statistical books in the comptroller's office. (See Form 63, pages 329–330.)

211. *Auditor's journal entry report.*—The final act of the auditor of disbursements is to prepare, for each grand division separately, a journal entry report covering all debits and credits to accounts in the grand division's general ledger, which are affected by the expenditures which have been audited for the previous month.

212. *Illustration.*—Let us assume that the following trial balance represents the condition of a four-track railroad as of July 1, 1909:

TRIAL BALANCE FOUR TRACK RAILROAD

July 1, 1909

Capital stock, common	$	$1,153,000.00
Capital stock, preferred	....	142,900.00
Capital stock, preferred scrip	....	5,450.00
First mortgage bonds	....	1,332,000.00
Cost of road and equipment	2,659,252.32	
Cash	2,452.56	
Bills payable	....	20,321.86
Accounts payable	....	6,331.78
Agents and conductors	1,708.80	
Individuals and companies	....	67,187.24
Foreign companies' mileage	....	87.12
Foreign companies' tickets	....	196.36
U. S. P. O. department	771.34	
Blank express company	916.36	
Agents' drafts on treasurer	....	145.94
Prepaid advances for other lines	....	.32

Back charges	$ 18.36	
Overcharges on freight........................	19.84	
Car mileage balance..........................	....	$ 99.88
Southern railway company.....................	....	734.90
Earnings, passengers	....	8,135.84
Earnings, freight	....	11,386.78
Earnings, mail	....	1,546.96
Earnings, express	....	3,494.52
Operating expenses	20,771.10	
Interline freight account accrued............	.54	
Interline ticket account accrued.............	....	359.76
Taxes	1,184.00	
Interest on bonds............................	111,000.00	
Interest on discount.........................	194.78	
Insurance paid in advance....................	123.98	
Taxes paid in advance........................	20,013.78	
Coupons due and unpaid.......................	....	68,002.00
Total	$2,820,681.26	$2,820,681.26

We find upon examination of this trial balance that the only item about which we might have any doubt is that of "Overcharge on freight, $19.84." One interpretation of this is that it represents excess charges to shippers and consignees for which claims have been made and allowed resulting in an entry of the character—

Overcharge on Freight.....................	$19.84	
To individuals and companies............		$19.84

Another interpretation is that it represents claims for overcharges, as before, which had been allowed, the entry being—

Freight Revenue	$19.84	
To individuals and companies............		$19.84

According to our interpretation this would be an item in the income account.

INCOME ACCOUNT.

Over charges on freight. $	19.84	Passenger Earnings	8,135.84
Operating Exp.	20,771.10	Freight Earnings	11,386.78
Net Earnings, down	3,773.16	Express Earnings	3,494.52
		Mail Earnings	1,546.96
	24,564.10		24,564.10
Taxes	1,184.00		
Int. on Bonds	111,000.00	Net Earnings	3,773.16
Int. & Disct.	194.78	Net Deficit to P. & L. ..	108,605.62
	112,378.78		112,378.78

PROFIT AND LOSS (DEFICIENCY ACCOUNT).

Balance	$ 20,018.78	Balance forward	$ 128,619..40
Balance from Income acct.	108,605.62		
	128,619.40		128,619.40
Bal. brought down	128,619.40		

BALANCE SHEET.

ASSETS.

CAPITAL ASSETS.

Cost of road and equipment	$2,659,252.82

CURRENT ASSETS.

Cash	2,452.56
Agents and conductors ..	1,708.80
U. S. P. O. Dep't.	771.84
Blank Express Co.	916.86
Back Charges	18.86
Interline Ticket acct. accrued	.54

DEFERRED ASSETS.

Insurance paid in advance	128.98
Taxes paid in advance ..	2,258.50
PROFIT AND LOSS ...	128,619.40
	$2,796,117.16

LIABILITIES.

CAPITAL LIABILITIES.

Cap. Stock & Common ..	$1,158,000.00
Capital Stock pref'd ...	142,200.00
Preferred Scrip	5,450.00
1st Mtg. Bonds	1,332,000.00

CURRENT LIABILITIES.

Bills Payable	20,321.86
Accts. Payable	6,331.78
Individuals & Co.'s	67,187.24
Foreign Co.'s Mileage ..	87.12
Foreign Co.'s Tickets ...	196.86
Agents Drafts on Treas. .	145.94
Prepaid advances for other lines	.32
Car Mileage Balance	99.86
Interline Ticket acct. accrued	359.76
Coupons Due, unpaid ...	68,002.00

DEFERRED LIABILITIES.

Southwestern Ry. Co. ...	734.90
	$2,796,117.16

	Subdivision	Maint. of Way		Maint. of Equip.	
		Pass.	Frt.	Pass.	Frt.
	Phila. Division				
	Middle Division				
	Total Main Line				
	Schuylkill Division				
	P. m—Newark				
	Etc.				

FORM 63—Report to Comptroller

Traffic Expense		Trans. Expense		General Expense		Totals
Pass.	Frt.	Pass.	Frt.	Pass.	Frt.	

Form 63—Continued

CHAPTER XIX

STREET RAILWAY ACCOUNTING

213. *The "zone" system.*—The ordinary street railway handles but one class of business—transportation of passengers—which is entirely a cash business. The rates of fare being uniform, it is not obliged to maintain a large number of offices or to provide an elaborate system of selling tickets or auditing accounts. Instead, the fare is paid direct to the conductor, thus greatly simplifying the accounting problems presented.

Most roads operate under what is known as the "zone" system, by which a certain standard rate is charged for the transportation of a passenger between any two points within the zone limits. We will confine our attention in this chapter to the lines which operate under this system.

214. *Cash registers.*—At the present time it is almost universal to have the cars equipped with some form of fare register. Every time a conductor collects a fare, he is supposed to ring it up upon these registers. The mechanism is so adjusted that when a fare is rung up a bell is struck which can be plainly heard throughout the car.

As these registers are placed in the end of the car, in the sight of the passengers, the company really relied upon its patrons to furnish voluntary detective service over their employés. It has been found, however, that the public are poor detectives; and as a consequence the companies are forced to provide a bureau of "spotters,"

whose duty it is to detect the failure of conductors to ring up all the fares which they collect. These men are constantly riding on the cars. In many cases a special type of register is used. This is necessary where several kinds of transportation are in use. Registers are now prepared which will record at least ten different kinds of fares.

There are many faults in this system of fare collection. One is the loss of fares in the hours of crowded traffic morning and evening. At such times it is almost impossible for a conductor to tell whether he has collected a fare from any particular person, and as a consequence many people do not pay their fare.

215. *"Pay-as-you-enter" and "pay-within" cars.*—In order to prevent this, and also to decrease the losses through accidents, several devices are being extensively introduced at the present time. One is the "pay-as-you-enter" car. Under this arrangement, a large platform is provided upon the rear of the car, so arranged that persons entering do so by a separate passage from that used by those who are alighting. The conductor maintains a station just outside the door leading into the car, and every person getting on is obliged to pay his fare before he can secure admission.

Another devise is the "pay-within" car. This is very similar to the "pay-as-you-enter," except that the car is constantly closed and it is impossible to alight before the doors have been opened by the motorman or conductor. In this way the damage claims are still further reduced. These new types of cars, however, simply serve the purpose of increasing the likelihood of the conductor getting the fare. They do not insure that the company will get the money.

216. *Devices to check dishonesty of conductors.*—In

order to prevent conductors from appropriating fares, a device known as the "fare box" was invented many years ago and has been improved from time to time. This is coming into very general use. Under this arrangement, the passenger when entering the car, instead of handing the fare to the conductor, inserts it through a slot into the fare box. This is usually made of steel, is leather covered, and provided with handle and lock. The box is locked at the office of the company and the key retained there. At the top of the box there are two slots, one for coins and one for tickets, in case the latter are sold. The conductor simply makes change but never takes the passenger's fare. The slots are provided with teeth which grip the coin or ticket as soon as inserted a fraction of an inch, and it can not then be withdrawn but must pass into the box.

This device is open to the objection that an unscrupulous passenger can insert a spurious coin or ticket. As a consequence many companies are now adopting the device of requiring passengers to buy a certain number of coins which are different in size from any of the standard forms of money. Where this is done, the companies usually charge excess fare for those passengers who do not use the coins and issue tickets to them in exchange for money. These are redeemable at the office of the company, where the excess is refunded. Where this system is followed, the conductor handles little or no money. The railway offices instead sell the coins, thus completely changing the system of cash accounting. Most companies, however, have not adopted this device. They still operate under the older system of having the conductor take the money, and rely upon the fare register to check up his honesty.

217. *Exchange tickets and transfers.*—A large num-

ber of companies also sell exchange tickets, and issue transfers which entitle the holder to a ride upon another line than that upon which the original fare was paid. Instead of paying two straight fares or ten cents for the trip, the passenger is able to make the journey for a single fare of five cents in the case of a transfer, and for eight cents if he buys an exchange. These transfers and exchanges must be accurately accounted for. The company keeps a record of all exchanges and transfers received from the printing department. These are charged to the conductors according to a plan shown in Form 64, page 335.

It will be observed that a record is made of the commencing and ending numbers of the exchange pad given to the conductor. The third column records the difference, or the total number of exchanges issued to him. At the end of the day he turns in the balance of his exchanges together with a statement on his way bill (which form will hereafter be discussed), showing the total number of tickets sold. From this way bill or statement, the fourth column is filled out, giving the total number of exchanges issued by the conductor. The clerical force then checks this result by ascertaining the total number of exchanges returned by the conductor both in fact and according to his statement. The total number issued by the conductor, plus the total amount returned, must equal the toal number of transfers or exchange tickets turned over to him at the beginning of his run.

218. *Conductor's way bill.*—Each conductor when taking a car out for a run is provided with a slip known as the "conductor's way bill" (Form 65), upon which he is expected to record at the end of each trip the amount of cash or tickets which he has taken in. The word

EXCHANGE TICKET STATEMENT

..............................Division 190

RECEIVED FROM PRINTING DEPARTMENT

Commencing No............................... *Ending No.*.............................. *Total,*..............................

Runs	Exchanges Issued to Conductor		Total Issued to Conductor	Total Issued by Conductor	Total Returned by Conductor	
	Commencing	Ending				
1						
2						
3						
4						
5						
6						

FORM 64—Exchange Tickets and Transfer Report

"run" in the street railway business has a technical meaning. Some systems have adopted the policy of allowing the men to make a certain number of runs constituting the standard day at one time; for instance, a man will go at six o'clock in the morning and return at four in the afternoon, without any interruption. This has the advantage, from the point of view of the company, of making rigid requirements concerning the number of cars on the street. As every one knows, the demands upon the system vary.

What are known as "traffic peaks" or points of heavy business occur in the rush hours in the morning, when people are going downtown to business, and in the evening when they are returning to their homes. It is advisable to arrange the employé's day so that a number of cars can be laid off during the hours of light traffic. In order to make this possible there has been developed the "split run." Under this arrangement a man works a certain number of hours each day, which are usually divided into sections. He will have, in reality, two or perhaps three runs a day. He may go out with a car at six in the morning and return again to the barn at ten o'clock; he will then have three or four hours at home, and will make his second trip from three to eight in the afternoon. This is but one of the many arrangements possible under this system. The nature of the "conductor's way bill" is self-evident from its form:

On the outside of the form there is a space upon which the "register statement" can be taken. The registers are usually all numbered, as they are detachable from the cars and easily removed from them when in the barns. The conductor, when taking a car out at the beginning of his run, takes a note of the commencing number recorded on the register. At the end of his

REGISTER STATEMENTS

Register No............................

Ending,..

Commencing,...

Total,...................

Register No..........................

Ending,..

Commencing,...

Total,...................

Register No............................

Ending,..

Commencing,...

Total,...................

Register No............................

Ending,..

Commencing,...

Total,...................

Total Registration,...................

STATEMENT OF EXCHANGE TICKETS

Ending, ...

Commencing, ...

Total Sold, ...

STATEMENT OF TRANSFER TICKETS

Ending,..

Commencing,...............................

Total Issued,..............................

FORM 65—Conductor's Way Bill

Form 103. 200m. 8-13-07.

REFERRING TO RULE No. 40 IN "BOOK OF RULES"

IN CASE OF EMERGENCY, CALL

BELL PHONE "MARKET 4407"

KEYSTONE PHONE "MAIN 951"

In making up this Way-Bill all totals must balance correctly

STATEMENT OF PASSENGERS

Passengers		$	Cts.
	5ct. Fares,		
	8ct. Exchanges Sold,		
	8ct. Exchanges Received,		
	5ct. Tickets Received,		
	Package Tickets Received,		
	Free Tickets Received,		
	Totals,		
	Package Tickets Sold,		
	Grand Total,		

Each trip must show the Car number used.

In all cases the starting time on the Schedule is the OUT trip; the return is the IN trip.

When on time, put down the Schedule time leaving each end; when not on time, put down the actual time.

In no case add Passengers of one trip, or part of trip, to those of any other trip. Each trip, or part of trip, must show for itself.

....

....

....

FORM 65—Continued

Figure 1.

Conductor, ... | ....

1st Block No................. *Badge No.*................................ | *Motorman,*..

2d Block No................. *Run No.*................................

Car No.	Trip		Time	5 ct. Fares	Exch's Sold	Total Cash		Tickets Received			
						$	Cents	Exchanges	5 ct.	Package Tickets	Free
	1	OUT									
		IN									
	2	OUT									
		IN									
	3	OUT									
		IN									
	4	OUT									
		IN									
	5	OUT									
		IN									
	6	OUT									
		IN									
	7	OUT									
		IN									
	8	OUT									
		IN									
	9	OUT									
		IN									
	10	OUT									
		IN									
	11	OUT									
		IN									
	12	OUT									
		IN									
	13	OUT									
		IN									
	14	OUT									
		IN									
	15	OUT									
		IN									
Totals,											

Form 65—Continued

FIGURE 1.

.... *Division.*

.... *Badge No*....................

Date, ...

Total Passengers	Register Statements, Ending by Half Trips	Exchange Ticket Statements, Ending by Half Trips	Transfer Ticket Statements, Ending by Half Trips	Transfers Received

FORM 65—Continued

run he makes a similar notation. The difference between the commencing and the ending numbers should equal the total number of fares which he has taken during the run.

219. *Daily record of registers.*—The company, however, does not rely upon the record of the conductors for a record of the registers. They have in each barn a number of accountants, whose duty it is to take the commencing and ending numbers of each register, as the car goes out and returns from each run. This record is taken on a form usually known as the "daily record of registers" (Form 66). The conductors are required to turn in their collections either at the end of the run or at the end of the day. (See page 342.)

220. *Reporting of collections.*—There are several methods by which conductors may report their collections. One is known as the "bag system." Under this arrangement, each conductor places his collections of cash and tickets in a stout bag, made of canvas. This he deposits in a safe, or turns over to some designated person at the car barn. Before tying up his bag, he has inserted a memorandum slip upon which he has noted the number of cash fares, and of each kind of ticket or transfer which is supposed to be contained in the bag. The difficulty of this system is the likelihood of misunderstanding concerning the amount of money claimed to have been placed in the bag. Sometimes the conductor's packages will not contain the amounts which are listed, and when the matter is brought to the attention of the men they will insist that their figures are correct. This causes friction, which raises a question as to the advantages of such a system.

Many roads have adopted the system of having "receivers" at each barn, whose duty it is to receive

Form 239 50m. 8-20-08

DAILY RECORD OF REGISTERS.

Philadelphia Rapid Transit Company

Division. 190

No. of Register	No. of Run	Commencing	Ending	Total	No. of Run	Commencing	Ending	Total	No. of Run	Commencing	Ending	Total	No. of Run	Commencing	Ending	Total	Total Fares Registered

FORM 66—Daily Record of Registers

the conductors' returns as they quit work. The cash and tickets are counted in the presence of the conductor, and if any differences are found they are adjusted immediately. The receiver is required to keep a record of the sums which he takes in from each conductor. This he does upon a sheet which is designated as the receiver's daily report." (Form 67, pages 344–347.)

The method followed by a large percentage of companies is to have the receiver enter from the conductor's way bill, the register number, and the commencing and ending figures of the total number from his register statement. He also summarizes these results by filling out the other entries called for by the sheet. This, it must be remembered, has been taken from the conductor's statement. The receiver then proceeds to count the tickets and cash. If he finds that the conductor is over or short, he does not erase the entries; but instead carries a slip memorandum, and when he finally makes up his report notes overs and shorts by items upon the back of his daily report. Thus the collections are shown by the difference between the statements on the two sides of this sheet.

Most companies follow one of two systems in the handling of money taken in by the receivers. Some have the receivers deposit their collections in bank at the end of each day's business. In other cases they are forwarded through a special car, which visits the various barns, to the company's central office. No matter which system is used, the receiver makes a daily report to the accounting department, stating the amount of tickets and cash which he has taken in from the conductors on each line, operating from his barn. This report is shown in Form 68, page 349.

In order that the accounting department may have

Form 186 A. 5000. 3-4-08. Fig. 2.

PHILADELPHIA RAPID TRANSIT

....Division

Run	Trips	Conductor	Register No.	Register Statement				5 Cent Fares	8c. Exch. Sold
				Commencing	Ending	Total	Grand Total		
1									
2									
3									
4									
5									
6									
7									
8									
9									
10 etc.									
		Totals							

Form 67—Receiver's Daily Report

COMPANY.—RECEIVER'S DAILY REPORT.

....190....

Total Cach		Tickets Received				Total Passengers	Exchange Ticket Statement			Transfers
$	Cts.	Exch.	5 Cts.	P'kage Tickets	Frees		Commencing	Ending	Total	

FORM 67—Continued

From Fig. 2.

Way-Bill Return		Receiver's Return	Over	Short	OVER		SHORT	
					$	cts.	$	cts.
	8 Cent Exchanges Received.....							
	5 Cent Tickets Received........							
	Package Tickets Received.......							
	Free Tickets Received..........							
	Cash..........................							
				Balance				

FORM 67—Continued

Passengers	WAY-BILL RETURN			Passengers	TRUE RETURN		
		$	Cts.			$	Cts.
	5 Cent Fares..................				5 Cent Fares..................		
	8 Cent Exchanges Sold.........				8 Cent Exchanges Sold.........		
	8 Cent Exchanges Received.....				8 Cent Exchanges Received.....		
	5 Cent Tickets Received........				5 Cent Tickets Received........		
	Package Tickets Received.......				Package Tickets Received.......		
	Free Tickets Received..........				Free Tickets Received..........		
	Total				Total		

..................................Passenger per Registers. ....5 Cent Tickets,...................................

..................................4½ Cent Tickets,..................................

FORM 67—Continued

for its own information and for the officials of the company, a summarized report showing the day's operations, a summary sheet is prepared. This shows the cash collections by the divisions or each line within the city. The total of this sheet should show the total cash receipts of the company for the day.

Unlike the steam railroad, the street railway need not make journal entries charging agents and crediting the passenger earnings for the income earned in any one day. As the street railway business is distinctly one of "cash on the spot," all moneys turned into the treasurer form the basis for a cash book entry, as a debit to cash and a credit to passenger earnings. It follows that the income side of street railway accounting is exceedingly simple. In reality the company uses but one book for this purpose (the cash book) and such subsidiary forms as are necessary to furnish a check upon minor employés and the basis for making the entry.

221. *Disbursements.*—The disbursements side of street railway accounting is almost identical with that of the steam railroad, which has already been discussed. It is therefore unnecessary to go further into the subject.

222. *Interurban railways.*—Within the last few years, there have come into existence a large number of interurban railways, which are similar to the steam railroad in their business, but which are operated by electricity. The accounting of such companies closely resembles that of both street and steam railway companies. Those parts of the accounting system dealing with the handling of the cash affairs by the street railway companies, are retained by the interurban. Where tickets are sold according to the practice employed by

RECEIVER'S DAILY REPORT TO ACCOUNTING DEPARTMENT

RIDGE AVENUE

....19........

	Tickets	$	Cts.
Norris and Susquehanna			
Columbia Avenue................			
Manayunk......................			
McKean.......................			
Wallace and Spring Garden.......			
Morris and Tasker..............			
Office.........................			
Total Tickets,			
Fare and Exchange Ticket Cash,			
Deposited in Bank....................			

....Receiver

FORM 68—Receiver's Daily Report to Accounting Department

steam railroads, the methods used by those companies have been adopted. A large number of interurban roads also carry on a freight business. The accounting methods used in such instances are direct adaptations of those used by the steam railway. Every year the accounting systems of the interurban and the steam railroad companies become more alike, indeed the Interstate Commerce Commission has provided that all electric railways doing an interstate business shall follow practically the same system of accounting as that used by the steam railroads.

CHAPTER XX

MUNICIPAL ACCOUNTING

223. *Public corporations.*—We now turn from the accounting of private enterprises to public accounting. The difference in the accounting methods is largely due to the legal difference between a private and public corporation.

A public corporation is one which has been created by a sovereign state for the purpose of administering the local affairs of a given district. It is impossible for a state to administer the entire affairs of people within its domain through one central organization. It is therefore necessary to create many subdivisions, such as cities, counties, boroughs, and townships, to which are entrusted the more specialized or legal portions of the work of government. These subdivisions are erected into a corporation by a general or special law which in the theory of our jurisprudence constitutes a charter.

224. *Chief distinction between public and private corporations.*—There are certain fundamental differences between the status of private and public corporations. These were explained in general in a previous volume. The chief distinction which affects our subject is in regard to the status of claims against the two classes of corporations. The ordinary business man must exercise care that he will always have sufficient funds to meet his obligations. He also must be careful that he is always solvent or in other words that his assets actually exceed his liabilities. As a consequence, a very

important part of private accounting is concerned with a comparison of assets and liabilities, which is made through the balance sheet.

There is another reason given for making this comparison. The creditor of a private corporation realizes that his ability to collect his claim depends upon there being a proper excess of assets over liabilities and he is constantly inquiring concerning the balance sheet of his debtor. In every active business, it is found that there are considerable differences between the correspondence of assets and liabilities from one sheet to another. It is the duty of the accountant to give reasons for these differences. This he does by constructing a profit and loss statement, or as it is sometimes called, a statement of income and expenditure, which shows in a condensed form the amount which has been earned by the business during the year and the amount which has been expended for all purposes during the same period. This profit and loss statement is also of value because it shows to the owners the profitableness of their business during the period.

In the case of public corporations, however, the situation is radically different. A city or other public corporation does exercise the same thought concerning the adequacy of assets. In the volume on investments and speculation comparison is made to show the small proportion which the bonded debt of our large cities bears to the value of the real property which was indirectly pledged as security for the loans. The connection is so slight that such a comparison is rarely, if ever, made, even by bond houses and other intelligent buyers of these securities. The chief anxiety concerns the sufficiency of revenue to met the claims of the bondholders and the ordinary expenses of the city. This is again

a matter of no very great importance, for the courts will force the city to levy such taxes as may be necessary to meet their fixed obligations. The income of a private corporation, in other words, is a matter largely beyond its control: it depends upon the profitableness of its business. The public corporation, however, can really fix its own income by changing the tax rate to a point where it will produce the required amount of money to meet its obligations.

225. *Other differences.*—In the case of a private corporation the owners and creditors are anxious to know what has been the real revenue arising from the operation of the business and how this compares with its expenditures. A considerable excess of revenue over expenditure means a large profit. Unless this distinction is carefully made, it would be possible by confusion of accounts to give an entirely erroneous impression concerning the condition of the business. For example, "A" might borrow $40,000 upon a mortgage placed on his property. This money would be placed in bank to the credit of the company's account. During the year the company might have taken in $50,000 as revenue from operation. The total amount of money received during the year, therefore, would be $90,000. Let us assume that the expenses of the operation during this period were $60,000. From the cash statement it would appear as though the company had made $30,000 during the year. As a matter of fact, when this is analyzed, we find that it actually lost $10,000. It spent a portion of the money which was borrowed, and the imagined profits were in reality only the balance of the borrowed money which must some time be returned.

In the case of a municipality, however, this practice of separating moneys received is not followed out. This

constitutes the chief difference between public and private accounting.

226. *Basis of municipal accounting.*—The basis of the system is the cash book. In this cash book all funds received by the municipality are entered, regardless of the source from which they are received. Money secured by the sale of bonds is not kept separate and distinct from money received from water rent, or police court fines. As a result, the cash book is really not a statement of the ordinary revenue derived by the city but a total statement of money received from all sources. It is impossible to tell, without a complete analysis of the municipality's books, exactly what has been the result of the ordinary operation of its affairs during any given year.

227. *Absence of the balance sheet.*—Another difference between municipal accounting and private accounting is the absence of the balance sheet in the case of the former. There is really no valid reason for this difference. The only possible explanation is that investments of municipal capital have been made in street paving, boulevards, drives, parks, public buildings, and many other similar works which are necessary to the community and to the administration of the city government, but which are nevertheless non-revenue producing and have no value either in payment of municipal debts, or in contributing towards its running expenses.

Many municipalities have bond issues outstanding whose proceeds were used to construct such enterprises as municipal lighting plants and water works. These are often very productive, but where such enterprises are conducted by the city, it is invariably found that they are carried on as separate enterprises with distinct accounting systems of their own. The net revenue

received from them constitutes a single item among the city's receipts carried on its general books.

228. *Expenses of a municipality.*—The expenses of a municipality are to a large extent determined by the city's council. At a certain time in the year the heads of the various municipal departments are requested to furnish to the finance committee, or some similar body, an estimate of their probable expenditures and financial requirements during the coming year. These estimates are usually prepared in tabular form, showing in detail the money needed for the operation of that division of the municipality. They are gone over by the finance committee and recommendations are made to council that different sums be appropriated for various enumerated purposes. Finally council passes the appropriations, or budget, which regulates the allowances for each municipal department, subdivision and borough and the money to be spent for extraordinary municipal purposes, such as filtration plants or new sewers. The various portions of the municipal government cannot exceed these appropriations without first securing an additional or supplemental appropriation from council.

229. *The appropriation ledger.*—The principal book in municipal accounting is the "appropriation ledger," which has a twofold purpose; first, to record the various amounts appropriated for each grand division and subdivision; and, second, to show warrants which have been drawn against the treasurer under authority of these appropriations. The difference between the sum of these warrants and the appropriations represents the balance available for the department. A page of the appropriation ledger showing the accounts of the public health department is shown in Form 69 here inserted.

Similar accounts are kept for every other municipal

division. The operation of this book is explained in the following rules made by the Bureau of Inspection and Supervision of the Public Offices of the State of Ohio:

1. Enter at the head of each column under the head of "appropriation" the appropriation as made by council.

2. Enter each warrant issued on the page which contains the account upon which the warrant is drawn, placing the amount thereof in the columns "amount of warrant," in the proper column as to appropriation, and in the total of the division or department in which the expenditure is made.

3. Total each column monthly (or as often as balances are desired) and enter in red ink; add monthly totals to the totals of the preceding months of the fiscal year and enter in black on the line next below; deduct these totals from the total appropriations at the head of the columns and enter in red ink. The balances obtained are those required by city auditors in the monthly statements to mayors required under section 44 of the code.

230. *Recapitulation of expenses.*—This total classification of expenditures is very much involved and a separate division of the appropriation ledger is provided in which the recapitulation by the important departments is made by the expenditures. Form 70, pages 357–358 shows this recapitulation of expenses.

The rules adopted by the State of Ohio governing the construction of this account are as follows:

"The monthly total of disbursements in each division, or department, of the appropriation ledger is carried to the proper column in the recapitulation, the footings for each month are made, for posting to the debit of

PUBLIC HEALTH DEPARTMENT

Departmental Subdivisions	Fol.	Jan.	Feb.	Mar.	Apr.
General Administration of P. H....					
Legal Advertising.................					
Sanitary.........................					
Quarantine.......................					
Inspection of Food Products, etc...					
Grand Total..................					

FORM 70—Recapitulation of Expenses

OF EXPENDITURES

May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Grand Total

FORM 70—Continued

the several fund accounts, and to the credit of the city treasurer's account in the "fund ledger."

231. *Municipal receipts.*—We turn now from the consideration of municipal departments to municipal receipts. All receipts are entered in the fund ledger which contains separate accounts identical in number and classification with those contained in the appropriation ledger. To these are credited all sums received either for water rents, licenses, fines, special assessments or municipal bonds, or from any other source whatever. The form of the "receipts journal," as regards the public health department, is shown in Form 71, page 360.

Similar accounts are kept for every other main subdivision of the municipality. The rules governing the operation of this journal in the State of Ohio, which are typical of the rules prevailing throughout the country, are as follows:

1. Enter each pay-in order consecutively, placing the amount thereof in the columns "amount," in the proper classification, and in the total of the proper fund.

2. Total each column monthly (or as often as balances are desired), and enter in red ink; add monthly totals to the totals of the preceding months of the fiscal year, and enter in black ink on the line next below. The monthly totals of each month are posted to the credit of the several fund accounts, and to the debit of the city treasurer's account in the "fund ledger," except special assessment receipts, which are posted in detail to the proper fund in the "special assessment fund ledger."

232. *The fund ledger.*—The final important record kept by the municipality is the "fund ledger." This shows a summary of the money which has actually been

	Public Health Fund				
	Taxes	Licenses	Permits		
	General		Burial		

FORM 71—Receipts Journal

received and credited to each department; and in parallel columns shows the sums which have been spent by this department. The difference, therefore, represents the total money in the treasury and actually available for expenditure by the department. The fund ledger shows the actual amount of money on hand in the case of each department, while the appropriation ledger shows the amount of money which the city has authorized the departments to spend, but which may not have been collected and credited to the department. The form of the section of the fund ledger dealing with the public health department which is similar in general to that dealing with the other departments, is as shown in Form 72, pages 362–363.

The rules in Ohio governing the use of the fund ledger are as follows:

"1. Open accounts with the city treasurer and with each fund, except special assessment funds, on separate pages of the ledger, entering the proper balances to each account. The treasurer's account includes special assessment funds.

"2. Receipts, as obtained in the monthly totals of the 'receipt journal' are credited to the appropriate funds, the city treasurer's account being debited with the total amount thereof, including special assessment receipts.

"Expenditures, as obtained in the monthly total of the recapitulation of the 'appropriation ledger,' are debited to the appropriate funds, the city treasurer's account being credited with the total amount thereof, and in addition thereto the special assessment expenditures, which are obtained by a recapitulation of the special assessment fund ledger. Monthly trial balances should be taken off to prove accuracy."

238. *Cash journal.*—Each department also runs a

PUBLIC HEALTH FUND.

	Date			Folio	Debit Expend-iture	Credit Receipts	Balance	

FORM 72—Fund Ledger

	Debit Appropriation	Credit Receipts	Balance		

Form 72—Continued

cash book under the name of "cash journal." This book serves the same purpose as a journal, but the cash book entries are reversed. (See Form 73, page 365.)

Public Health Fund		
Debit Expenditures	Credit Receipts	Balance

Form 73—Cash Journal

CHAPTER XXI

EXECUTOR'S WORK

234. *Importance of subject.*—It is a popular notion that all an executor has to do is to receive and disburse money and at the end of his administration fill out a blank form provided by the clerk of the probate or surrogate's court. Consequently in the selection of executors will makers have persisted in requiring only social qualifications until the incompetence of executors generally has become a matter of common knowledge, as have also the resultant losses to estates.

To-day, however, estates are greater in size than ever before, and the work of the executor has increased proportionately. In addition the rapid development of accountancy is having a perceptible influence upon law in making it require from executors more exact accounting. As a result public accountants are more and more being called upon to assist in the administration of estates, and estate accounting has become a specialty in the accounting profession. This fact is the justification for literature upon the subject.

235. *Method of treating the subject.*—The following chapters will attempt only to outline the whole subject and not treat any part of it at length, and since the work of the administrator is practically identical with that of the executor, they will deal with the work of the executor only.

A description of the executor's work will be followed by an exposition of a double entry system of accounts

for an executor. In this there will be worked out in books of account a set of typical transactions in the usual chronological order from the beginning to the close of an administration. Each transaction will be dated and a section of the text correspondingly dated will give any necessary explanation of rules of law, principles of accounting or customary practices involved in the book entries of the given date.

236. *Definitions of executor, administrator and trustee.*—An executor is a person to whom the carrying out of the provisions of a will concerning personal property has been confided by the testator in his will and who has been duly approved by the court.

An administrator is a person appointed by the court to distribute the personal estate of a decedent who left no will or of a testator who named no executor able to serve.

A trustee is a person who holds the legal title to property subject to an obligation to apply or deal with such property according to the terms of a trust for the benefit of another who is called the *cestui que trust.*

Both the executor and the administrator are officers of the court to wind up generally the personal estate of a decedent by collecting his personal property, paying his debts and distributing the personal property then remaining according to the terms of the will or the provisions of law if there be no will. They differ from each other chiefly in the fact that the executor is named by the testator in the will, whereas the administrator is appointed by the court where there is no will. A trustee, however, is an officer upon whom devolves no such general duty, but whose function is to make disposition in some specific way of some specific property. When he is appointed by a will, he is called a testamen-

tary trustee. The functions of executor and trustee are distinct, despite the fact that they may be exercised by one person. They are so distinct that a person who by a will is made both executor and trustee may decline to act in either capacity without affecting his right to act in the other.

237. *Definition of will and admission to probate.*—A will is one's solemn declaration in legal form making disposition of one's property, taking effect at death but revocable during life. A person who dies leaving a will is known as a testator.

Before the law will give effect to a will the court must approve it as complying with the law. This approval is called the admission of the will to probate. It usually involves the following steps: the filing of a petition to the court asking that the will be admitted to probate; the notification of all interested persons that the will will be propounded on a named day; the hearing or trial before the court, at which proof of the legality of the instrument offered as a will is made, and finally, the decision by the court that the instrument offered for probate is a valid will.

238. *Appointment and qualifying of executor.*—If the person named in the will as executor is one of whom the law approves as to age, residence and character, the court issues to him letters testamentary, which are the evidence of the court's approval. They are usually contained in a printed form which recites that the person has been appointed executor. Before the issuance of the letters the executor is usually required to take an oath of office and he may be required to file a bond for the faithful conduct of the administration. The circumstances under which a bond is required vary in the several states. It is usually possible for a testator

to relieve the executor from the burden of filing a bond by specifying in the will that no bond need be filed.

239. *Sources of authority.*—The executor's authority originates in the will and is transmitted to him by letters testamentary.

The administrator's authority comes directly from the court, since there is no will from which he can derive it. This authority is conferred by letters of administration which are similar to letters testamentary.

The trustee's authority, like that of the executor, originates in the will, but usually he receives no document such as letters testamentary to evidence his right to act. Without formalities he is recognized as a fiduciary officer under the control of the court.

240. *Inventory.*—The first duty of the executor is to make an inventory of the personal property of the estate over which he is to exercise control. Some states require him to report the inventory to the court; some states permit him to do so, while other states make no mention of an inventory. Whatever the law of the executor's state may be, it is very desirable that he prepare an inventory and where possible file it with the court, because an inventory fixes *prima facie* the number and the value of the estate's assets. If an inventory is filed, any person who claims that estate assets were omitted from it or were incorrectly valued in it, has the burden of establishing the truth of his claim. If no inventory is filed, such a person can put upon the executor the burden of establishing the fact that the executor has accounted for all the estate assets at their true valuations.

In most states the inventory should include only the personal property of the decedent, because the real property passes under the law without the intervention

of the executor either to the devisees (that is, persons to whom the decedent gave it by his will), or to the decedent's heirs if he made no disposition of it by will.

The inventory should state the items of personal property in detail, giving to each a value in dollars and cents. The value for the inventoried articles should be determined through an appraisal by disinterested persons. It is desirable and in most states it is possible to have appraisers appointed by the court.

Unless the law of the executor's state requires him to file together with the inventory a statement of the debts due by the decedent, the inventory should make no mention of such debts. A separate proceeding such as that described in section 244 is usually available for the ascertainment of debts.

241. *Collection of assets.*—After the filing of the inventory, the executor should proceed at once to secure possession of all the estate assets. If he believes that there are assets in the possession of persons who refuse to deliver them to him, he should institute legal proceedings to secure them. Such legal procedure is commonly called "discovery proceedings."

242. *Custody of assets.*—The executor is responsible for the preservation of the estate assets in his possession. In the preservation of them, he must exercise the same degree of care that an ordinarily prudent man would exercise in the care of his own property of similar nature under similar business conditions.

Cash belonging to the estate should be deposited in a bank of recognized standing in the name of the estate, the deposit being designated, for example, as "The Estate of W. R., by M. N., Executor." If the deposit is made in the executor's name without the designation of it as a fiduciary deposit, he is liable for any loss that

results, regardless of his care in selecting the bank. As a general rule, the duty of the executor is to collect and distribute the estate cash; it is no part of his duty to invest it.

In a solvent estate, personal property which is not specifically bequeathed should be divided among the general legatees, each legatee being charged with the inventoried value of the property given him as a payment on account of his legacy. If amicable distribution cannot be made, such property should be sold if there is reasonable assurance that it will realize its fair valuation on a sale. Otherwise the matter should be referred to the court.

243. *Expenses of administration and funeral expenses.*—The expenses of administering the estate are entitled to preference over all other claims. As to what may properly be included in the expenses of administration, see section 260.

After the payment of the expenses of administration, funeral expenses are usually given preference over the payment of debts. Some states allow the expenses of the last illness to be included with funeral expenses.

244. *Ascertainment and payment of debts.*—The law will not permit the distribution of a decedent's property to the exclusion of decedent's creditors. After the payment of administration and funeral expenses, the estate assets must be applied to the payment of debts existing at the time of decedent's death. Since there can be no certainty that all such debts can be ascertained by the executor from an examination of such books and records of the decedent as he can find, he is usually permitted upon application to the court, although seldom required to advertise in a way prescribed by the court for all creditors of the decedent to present their claims

to him for allowance and payment. If the law of the executor's state permits him to advertise he should do so for his own protection. He can be held personally liable for the payment of a debt presented to him within the time allowed by law to creditors for presenting claims if in the meantime by distribution of assets he has made impossible the payment of the debt out of the estate.

All debts due by the estate that are approved by the executor should be paid by him in the order prescribed by the law of his state. It is usual for the law to prescribe some order in which debts must be paid, preference being given to debts due to the United States, taxes due to states and cities, and judgments of courts. The order of payment is of importance only in cases where there are not sufficient funds to pay all the debts. In such cases the executor may render himself personally liable if he pays without regard to the prescribed order.

If an executor believes a claim to be invalid he should reject it. The creditor will then have a legal remedy by commencing an action against the estate in a proper court and in this connection it is to be noted that the court which appoints the executor has as a rule no jurisdiction to order the payment of a rejected claim, the law having given to the executor discretion as to the allowance of claims.

Debts are payable primarily from the personal estate, that is, from personal property; where, however, that is insufficient to pay them, the law provides means for the selling of real estate in order to secure sufficient money to pay such debts as cannot be satisfied out of the personalty.

245. *Legacies and their payment.*—After the payment of the administration, funeral expenses and debts,

the remaining property must be distributed in accordance with the provisions of the will. The gifts or amounts specified to be distributed are known as legacies.

A legacy is a gift of personal property by will, the person to whom it is given being called the legatee. Legacies may be general, specific, demonstrative or residuary. A general legacy is one which is payable out of the general assets of the estate, being a gift of money or other thing in quantity not in any way separated or distinguished from other things of like kind. A specific legacy is a gift of certain specific personal property such as certain jewelry. A demonstrative legacy is a gift of money payable out of a specified fund such as a certain savings bank deposit. A residuary legacy is a gift of all the personal property remaining on hand after distribution has been made according to the terms of the will in satisfaction of all general, specific and demonstrative legacies.

As a rule, legacies are not payable until a specified time, usually one year, after the issuance of letters testamentary. The reason why legacies are not payable at the beginning of the administration is that the creditors must be protected by the conserving of the assets of the estate until the amount of the debts has been ascertained. At the expiration of the specified time, general and demonstrative legacies bear interest against the estate.

Legacies are payable from the personal estate, that is, from personal property, unless the will provides that real estate may be sold to satisfy them. Specific legacies and demonstrative legacies are the first to be paid. If the assets then remaining are not sufficient to pay all of the general legacies, the latter are scaled down pro

rata so that each general legatee can be paid an equal percentage of his legacy. This process of scaling down is known as *abatement.*

Legacies may be subject to certain deductions, the principal ones being for the inheritance tax (see section 271), and for debts due to the testator by the legatee.

246. *Accounting by the executor.*—After the assets have been collected and the administration, funeral expenses and debts have been paid, and such payments on account of legacies as the executor has found advisable have been made, the executor must render to the court which appointed him a statement of his transactions in the form of an accounting. This accounting is to show the amount of cash and property received by him, the disposition he has made of it and the balance, if any, remaining in his possession. The forms of accounting vary in the several states. Some of them are exceedingly simple statements of receipts and disbursements. In these chapters, the form in current use in New York has been adopted because it is comprehensive and somewhat complex.

247. *Remuneration.*—For his work in administering the estate, the executor is given a remuneration usually in the form of commissions consisting of a percentage of the moneys which have passed through his hands. The New York scale of commissions and the New York method of calculating them are typical and consequently have been used in these chapters.

248. *Duties of testamentary trustee.*—Where the will provides that certain properties or sums of money are to be given to the executor or to some other person as trustee for some specific purpose the carrying out of the trust provisions is no part of the work of the executor. Specific properties or specific sums of money must be

set aside by the executor to form the trust funds, as there can never be a trust without a trust fund. Until the executor has as executor specified and set them aside, the testamentary trustee, whether he be the executor or some other person, cannot assume his duties.

The work of the testamentary trustee consists in conserving the trust fund and disposing of it in accordance with the terms of the trust. A common trust is one providing that certain property shall be held by the trustee for a specified period during which the income from the property must be paid to a person known as the life tenant, and that at the end of the period it shall be delivered to another person known as the remainder man. The property given in trust is known as the "principal"; its earnings during the trust period are of course called "income." The trustee is under the duty of preserving the principal intact so that there can be given to the remainder man the whole of the property which was intended for him. Consequently the trustee must credit and debit receipts and disbursements to principal and income in the most careful manner, in order that the principal shall not be reduced at the expense of the remainder man or increased at the expense of the life tenant. Questions of importance and sometimes of difficulty arise in this connection. In the succeeding chapters some of the most common of these questions are considered. Where the will contains trust provisions, the executor must from the date of death distinguish between principal and income. For although in practice the trustee enters upon his administration of the trust only when the trust funds are set aside, the trust provisions relate by law to the date of the testator's death, and the person entitled to the income from

the trust is entitled to that income from the date of the death of the testator.

249. *Summary.*—The duties of the executor, then, may be summarized as follows. He should prepare an inventory of all the personal property of the estate, or "estate assets"; he must collect and conserve the estate assets; he must pay the administration, funeral expenses, and debts owed by the testator and distribute the balance of the property in accordance with the terms of the will, not omitting to set aside any trust funds that may be specified; he must then account to the court of his appointment, presenting a report showing the cash and property which he has received, the disposition which he has made of it, and the balance, if any, on hand. Thereupon the court will determine the commissions due the executor, will authorize him to retain for himself the amount of his commissions together with an amount fixed by the court to reimburse him for the cost of the final accounting and will order him to distribute in accordance with the court's directions the cash and other estate assets then remaining in his hands.

CHAPTER XXII

ESTATE BOOKKEEPING SYSTEM

250. *Current bookkeeping.*—Since it is necessary for the executor at the close of the administration to render a detailed account of his transactions, he must keep current records whch will enable him to render that account. As a rule, the law does not prescribe any form of estate bookkeeping even where it does prescribe a form of final accounting; but many courts have held that where an executor fails to keep current books or keeps them in such manner that it is impossible readily to prepare the final accounting, the executor may be charged personally with the expense of preparing the final account. Consequently it is desirable that the executor keep his current accounts in a way which will enable him to prepare his final accounting without difficulty and at the same time to handle his current work without unnecessary labor.

251. *Systems generally recommended.*—Most writers on the subject of executors' accounts have prescribed a commercial form of double entry books for the executor.[1]

The general scheme of the double entry system is as follows. At the beginning of the administration the estate assets are debited to accounts bearing their names or to one account entitled, for example, "inventory" and the total amount of them is credited to an account en-

[1] For an ingenious system, see "Philosophy of Accounts," Sprague, section 366.

titled "estate" or some similar term. Subsequent receipts by the executor of property or cash are debited to the proper asset accounts. Receipts from the sale of assets recorded on the books are credited to the accounts of the assets sold; receipts which represent assets existing at the time of death but for some reason not recorded on the books, as for instance an asset discovered after the books have been opened, are credited to "estate"; receipts on account of income earned by estate assets during administration are credited to an account entitled "income." Payments of cash or distributions of assets made by the executor are credited to the proper asset accounts. Payments on account of expenses are debited to an account entitled "expense principal" if the expenses are to be borne by the persons entitled to the principal of the estate, or to an account entitled "expense income" if they are to be borne by the persons entitled to the income. The debts of the testator are not as a rule recorded on the books as estate liabilities but the payments on account of them are charged to an account entitled "debts of testator." Payments or distributions to legatees are charged to accounts with the legatees. At the close of the administration the nominal accounts are closed into estate and income and the credit balances in those accounts are distributed among the legatees' accounts, each legatee being credited with the amount of his legacy.

Writers differ as to the advisability of keeping separate sets of books where one person is both executor and trustee. One of them [1] prescribes a two column cash book for the purpose of separating executor's cash from trustee's cash but states that "it is useless trouble for the executor to keep a separate set of books for the trustee-

1 "Estate Accounting," Baugh and Schmeisser.

ship." In view, however, of the facts that the utmost care should be exercised to preserve intact the trust funds and to keep distinct the trust transactions and that usually the executorship is concluded before any substantial transactions on account of the trusteeship occur, it would seem advisable to run a separate set of books for the trusteeship, even though that might necessitate the running of two sets of books during part of the time.

252. *System used in illustrative case.*—The system of accounts proposed in these chapters embodies the general scheme outlined in section 251. The books required are a journal, a specially ruled cash book and a ledger. The proposed form of cash book has been designed to facilitate the current bookkeeping and to enable the executor to analyze currently the receipts and disbursements thus obviating the necessity for extensive analysis at the close of the administration.

The transactions by which this system will be illustrated will conclude this chapter. Chapter XXIII will be devoted to an explanation of the book entries to the date of the final accounting. Chapter XXIV will contain the discussion of the final accounting, the allowance of commissions and the final entries necessary to close the estate ledger and will show the books of account with all the entries made therein.

The transactions by which this system will be illustrated are as follows:

253. *Will.*—The following is the disposition of property by the will of W. R.:

WILL.

Article Second:—I give and bequeath to my good friend C. Y. all my books at present in my library.

ARTICLE THIRD:—I give and bequeath to my good friend S. T. the sum of $5,000.

ARTICLE FOURTH:—I give and bequeath to my nephew E. W. the sum of $5,000, payable out of my deposit at the C. Trust Company.

ARTICLE FIFTH:—I cancel and discharge the debt of $1,000, due me from C. D. for money lent him in 1895 without interest, making such cancellation and discharge my gift and bequest to him.

ARTICLE SIXTH:—I give and devise to my good friend C. Y. all my real estate to have and to hold the same to him, his heirs and assigns forever.

ARTICLE SEVENTH:—I give and bequeath all the rest, residue and remainder of my estate to my executor hereinafter named in trust nevertheless for the following uses and purposes:—

To be held, managed and invested and from time to time as in his sole discretion need be, re-invested by said executor or his successor in said trust for the benefit and advantage of G. R., in such good and productive stocks, bonds or mortgages as will produce, if possible, a sure and regular income; the net income of said fund is to be paid over to G. R. annually, during his own life, my object being to secure to him during his own life the use and enjoyment of the net income of said fund; and upon the decease of said G. R., the principal of said fund to be paid over to my nephew, E. W., for his use and benefit forever, and said trust thereupon is to terminate; and to said E. W., his executors, administrators and assigns I now give and bequeath the remainder in the principal of said fund.

By this will M. N. was appointed executor and trustee and required by the testator to give a bond.

254. *Schedule of property left by testator.*—

Books in Library	$ 2,000.00
Clothing and Personal effects	750.00
Household Furniture	1,000.00
Cash in 1st National Bank	9,000.00
Cash in C. Trust Co.	10,000.00
750 Shares of X. Y. Coal Co. $100.00 par	75,000.00

20 K. K. Bonds, 5%, 1920, interest payable January and July 1st, purchased in 1890 at 110. 10 of these bonds being pledged to the Second National Bank to secure a loan of $6,000....	20,000.00
Bond of A. B. secured by first mortgage on real estate. 5% interest due June 30 and December 31, principal due 1912....	10,000.00
Life Insurance Policy payable to Estate........................	5,000.00
Debt of C. D..	1,000.00
Improved Real Estate..	85,000.00
Contract for purchase of real estate for $1,500.00, $500.00 having been paid by testator before his death and balance of $1,000.00 payable Jan. 1, 1909..	
Contract for sale of real estate for $5,000.00, $1,000.00 having been received by the testator before his death and balance of $4,000.00 due March 31, 1909..........................	4,000.00
½ interest with E. F. in realty bought by testator and E. F. for $10,000.00 under contract providing for equal division of rents and amount realized on sale..........................	
½ interest in partnership with G. H............................	

255. *Chronological statement of facts.*—

1908.	
Oct. 15, Testator dies, leaving no widow or children surviving him.	
Oct. 16, Will read. M. N. receives 7% dividend on X. Y. stock declared Oct. 10..	5,250.00
Nov. 16, Will admitted to probate and letters testamentary issued to M. N. who qualifies as executor.	
Nov. 17, M. N. procures certified copies of will and letters testamentary, paying therefor Appraisers for inventory appointed	10.40
Nov. 20, M. N. receives from Life Insurance Company the face of policy and accrued dividends...........................	5,177.69
Nov. 30, M. N. pays funeral expenses..........................	500.00
M. N. pays premium on executor's bond................	662.00
M. N. commences advertising for creditors, paying.....	47.50
Dec. 11, M. N. completes inventory and pays appraisers........	30.00
Dec. 12, M. N. pays taxes accrued at death on real estate......	850.00
Dec. 12, M. N. pays taxes accrued at death on personalty.......	200.00
Dec. 31, M. N. advised by C. Trust Co. of credit for interest for six months to date..	200.00
1909.	
Jan. 2, M. N. receives interest on bond of A. B. for six months to 12/31/'08	250.00
Jan. 2, M. N. receives interest on K. K. Bonds to date, 12/31/'08..	500.00
Jan. 2, M. N. pays balance due on contract to buy realty........	1,000.00
Jan. 6, M. N. learns of deposit in Savings Bank of.............	1,000.00
and interest for year ended 12/31/'08............	40.00
Jan. 15, M. N. pays for repairs to furniture....................	50.00
Jan. 15, M. N. pays S. T. on account of legacy.................	3,000.00
Jan. 25, M. N. sells furniture at auction for...................	800.00
Jan. 25, M. N. pays auctioneer's fees..........................	20.00
Mar. 31, M. N. receives balance on contract to sell realty.......	4,000.00
Apr. 1, M. N. deposits for inheritance tax......................	11,000.00
July 2, M. N. receives interest on bond of A. B.................	250.00
July 2, M. N. receives interest on K. K. Bonds..................	500.00
July 2, Burglars break into M. N's office, crack the safe and steal from it the estate moneys just collected, amounting to $750.00 besides cash, securities and papers belonging to M. N. personally.	

July 7, M. N. authorizes the 2nd Nat'l Bank to sell the 10 K. K. Bonds pledged to it and satisfy the loan therefrom. The sale realizes net $9,500.00 and the Bank remits to M. N. which he deposits in the D. Trust Co.	3,500.00
Aug. 14, The D. Trust Company fails.	
Aug. 16, M. N. pays counsel fee for drawing will	500.00
Aug. 16, M. N. pays counsel fee for probate proceedings	100.00
Aug. 16, M. N. pays sundry debts of the testator	4,750.00
Aug. 30, the real estate owned with E. F. is sold for $12,000.00 and the rents collected to date amounted to $800.00, M. N. receiving from E. F.	6,400.00
Oct. 1, M. N. receives 7% dividend on X. Y. Stock, declared September 30th	5,250.00
Oct. 30, M. N. pays G. R. on account of income from trust	1,000.00
Nov. 15, M. N. pays inheritance tax amounting to $10,397.65, receiving cash from C. Y. and C. D. in the amounts of $4,507.75 and $47.50 respectively for their proportions of the tax, and receiving from the state tax officer $602.35, being the difference between the deposit of $11,000.00 and the amount of the tax assessed and paid.	
Nov. 15, M. N. withdraws from the C. Trust Co. and deposits with the general cash $237.50, the amount of the tax on E. W.'s legacy.	
Nov. 15, M. N. pays renewal premium on Executor's Bond	442.00
Nov. 30, M. N. receives from D. Trust Co. in full settlement	3,000.00
Nov. 30, M. N. receives from G. H. in liquidation of the partnership	1,000.00
Dec. 2, M. N. pays taxes on personal property accrued since letters testamentary were issued	200.00
Dec. 24, M. N. pays accountant's fee for services rendered during the administration	325.00
Dec. 31, M. N. advised by C. Trust Co. of credit for interest for year ended 12/31/'09	400.00
Dec. 31, M. N. pays stationery bill to date	130.00
1910.	
Jan. 5, M. N. advised by Savings Bank of credit for interest to date of	40.00
Jan. 5, M. N. receives interest on bond of A. B.	250.00
Jan. 5, M. N. receives interest on K. K. Bonds	250.00
Jan. 5, M. N. submits final accounting for judicial settlement of his accounts as executor, being allowed $250.00 for the expenses of the accounting and $1,687.83 for commissions.	

CHAPTER XXIII

ENTRIES UNDER SYSTEM

256. *Explanation of the method followed.*—The following sections explain in detail the bookkeeping necessary in connection with the transactions set forth in the chronological statement of facts (see section 255), describing the entries and designating the book in which they are made. In addition, the sections give, whenever necessary, brief explanations of rules of law, principles of accounting or customary practices involved in the transactions and the records of them. Cross references are given to other sections dealing with the same or related matters.

OCT. 15, 1908. A memorandum journal entry is made recording this fact.

257. *Memorandum journal entries.*—It is advisable for the executor to keep a diary, recording in it the details of important transactions. Then if his conduct be questioned at any time he will have readily available sufficient memoranda to refresh his memory. Ordinarily such memoranda can conveniently be kept in the journal in the form of memorandum entries. Such entries should state facts rather than conclusions and where possible should give references to extraneous documents and files, e. g., the folios of public records of estate documents. This latter practice will save much time in the necessary consulting of public records.

ESTATE OF W. R., DECEASED, CASH BOOK

Date 1908		Fol.	Account to be Credited	Particulars		Net Cash	Income	Realization of Assets Gain	Realization of Assets Loss	Sundries
Oct.	15	√	Estate	Cash per Inventory		9,000 00				9,000 00
"	16	1	Estate	Xy Dividend Declared 10/10/08		5,250 00				5,250 00
Nov.	20	3	Life Insurance Policy	Face Value of Policy and dividends		5,177 69		177 69		5,000 00
1909										
Jan.	2	1	Estate and Income	A. B. Mtge. Int. Apportioned as of 10/15/08		250 00	104 17			145 83
"	"	1	Estate and Income	K. K. Coupons, Apportioned as of 10/15/08		500 00	208 34			291 66
"	25	4	Furniture	Proceeds of Sale at Auction		800 00			200 00	1,000 00
Mar.	31	4	Contract of Sale of Realty	Balance on % of Contract		4,000 00				4,000 00
July	2	√	Income	A. B. Mtge Int., 1/1/09–6/30/09		250 00	250 00			
"	"	√	Income	K. K. Coupons, Due 7/1/09		500 00	500 00			
Oct.	1	√	Income	Xy Dividend Declared, 9/30/09		5,250 00	5,250 00			
Nov.	15	5	Inheritance Tax Suspense	Refund by State on Deposit,	$602 35	5,157 60				5,157 60
				Payt. by Cy—Tax on Realty,	4,412 75					
				Payt. by Cy—Tax on Books	95 00					
				Payt. by CD—Tax on $1,000 00	47 50					
"	"	2	C Trust Co.	Reimbursement for Tax on E. W.'s Legacy		237 50				237 50
"	30	2	D Trust Co. Suspense	Final Receipt in Liquidation		3,000 00			500 00	3,500 00
"	"	1	Estate	Receipt from G. H. in Liquidation		1,000 00				1,000 00
1910										
Jan.	5	√	Income	A. B. Mtge. Int., 7/1/09–12/31/09		250 00	250 00			
"	"	√	Income	K. K. Coupons, Due 1/1/10		250 00	250 00			
			Totals			40,872 79	6,812 51	177 69	700 00	34,582 59
1910										
Jan.	5	√	Balance Brought Down			13,543 39				13,543 39
			Totals			13,543 39				13,543 39

FORM 74—Debit Side of Cash Book

ESTATE OF W. R., DECEASED, CASH BOOK

Date 1908		Check No.	Vouch. No.	Fol.	Account to be Debited	Particulars	Net Cash	Expense Principal	Expense Income	Debts of Testator	Sundries
Nov.	17			√	Expense, Principal	Certified Copies of Will and Letters	10 40	10 40			
"	30			5	Funeral Expenses	Undertaker's Bill of 10/30/08	500 00				500 00
"	"			√	Expense, Principal	Premium on Bond	662 00	662 00			
"	"			√	Expense, Principal	Advertisement for Creditors	47 50	47 50			
Dec.	11			√	Expense, Principal	Inventory, Appraiser's Fee	30 00	30 00			
"	12			√	Debts of Testator	Taxes on Realty, Due at Death	850 00			850 00	
"	"			√	Debts of Testator	Taxes on Personalty, Due at Death	200 00			200 00	
1909 Jan.	2			√	Debts of Testator	Bal. on Contract to Buy Realty	1,000 00			1,000 00	
"	15			√	Expense, Principal	Repairs to Furniture for Sale	50 00	50 00			
"	"			6	S. T.	Advance on Legacy	3,000 00				3,000 00
"	25			√	Expense, Principal	Auctioneer's Fee on Furniture Sale	20 00	20 00			
April	1			5	Inheritance Tax, Suspense	Deposit on % of Tax	11,000 00				11,000 00
July	2			1	Income	Loss by Burglary—See Journal	750 00				750 00
Aug.	16			√	Debts of Testator	Counsel Fee re Will	500 00			500 00	
"	"			√	Expense, Principal	Counsel Fee re Probate	100 00	100 00			
"	"			√	Debts of Testator	Sundry Creditors	4,750 00			4,750 00	
Oct.	30			6	Trustee, Income	Pay't to G. R., % of Income	1,000 00				1,000 00
Nov.	15			√	Expense, Principal	Renewal Premium on Bond	442 00	442 00			
Dec.	2			√	Expense, Income	Current Taxes on Personalty	200 00		200 00		
"	24			√	Expense, Principal	Accountant's Fee	325 00	325 00			
"	31			√	Expense, Principal	Stationery Bills to date	130 00	130 00			
1910 Jan.	5			√ 6	S. T.	Balance Due on Legacy	1,762 50				1,762 50
					Totals		27,329 40	1,816 90	200 00	7,300 00	18,012 50
					Balance Carried Down		13,543 39				13,543 39
					Totals		40,872 79	1,816 90	200 00	7,300 00	31,555 89
1910 Jan.	5			1	Estate	Expenses of Final Accounting	250 00				250 00
"	"			1	Estate	Executor's Commissions	1,687 83				1,611 85
"	"			1	Income	Executor's Commissions					75 98
"	"			6	S. T.	Interest on Legacy	14 69				14 69
"	"			6	Trustee, Principal	On % Residue of Estate	6,327 04				6,327 04
"	"			6	Trustee, Income	Balance Due on Income	5,263 83				5,263 83
					Totals		13,543 39				13,543 39

FORM 74—Continued

Oct. 16, 1908. A memorandum journal entry is made recording the reading of the will and the steps taken by the executor at this time in beginning his administration. (See Section 257.)

258. *Cash book.*—The cash book is now opened. The first line on the debit side (Form 74, page 384) is left blank in order that cash on hand at the time of death may be entered as soon as the amount is determined by the inventory. (See section 265.) The receipt of $5,250.00 is entered on the second line and credited to estate. This entry in the estate account is made on the second line, the first line on the credit side being left blank so that the amount of the inventory may be entered on it as soon as that amount is determined. (See section 263.) The cash book should record only the active or checking bank account so as to show only the funds available for current use; all inactive deposits such as that in the C. Trust Company should be represented on the ledger by separate accounts.

259. *Powers and duties before issuance of letters testamentary.*—At this stage, the executor is under the duty to do anything necessary to preserve the estate but he has no power to dispose of any part of it except in the payment of funeral expenses. He should give notice of the death to life insurance companies in which the deceased had policies and to banks in which the deceased had accounts. Ordinarily he takes the initiative in getting the will admitted to probate, but any interested person is equally entitled to do so. Receipts given to debtors of the estate by the executor before the issuance of letters testamentary are valid and release the debtors, but the executor can not require payment before letters are issued.

260. *Custody of money received.*—(See section 242.) Usually there can be no better use for cash on hand than settling current demands upon the estate. But since under prudent management such demands are not always paid at once, cash on hand should be deposited in some bank of recognized standing, and a checking account opened. This checking account need not be in a bank paying interest but if the account is large and likely to remain for a year or more it is usually possible to secure interest. The deposit should always be made with a designation of its fiduciary character. While a bank will ordinarily allow such an account to be opened before the issuance of letters it usually will not honor checks until it is served with the letters testamentary.

261. *Dividends as principal or income.*—The profits of a corporation remain the property of the corporation until a dividend has been declared; they then become the property of the stockholders of record at the date of the declaration and are considered in law as earned by the stockholders at that date, regardless of the time of payment of the dividend. Since the dividend here was declared prior to the date of death it belongs to the principal of the estate, notwithstanding the fact that it was not received until after the date of death. It is accordingly credited to "estate." (See section 248.) Inversely, a dividend declared after death belongs to income, although the profits on which it is based may have been earned by the corporation before the date of death. No apportionment of dividends is possible because usually it is not known when the profits were actually made by the corporation, especially since it is the general rule for corporations when possible to keep their dividends uniform, by holding back enough in the

prosperous years to make possible dividends in years when there have been no current profits.

262. *Expense principal.*—

Nov. 16, 1908. A memorandum journal entry is made recording these facts. (See Section 257.)

Nov. 17, 1908. This payment is an administration expense and accordingly is charged through the cash book to "expense principal." It is not posted at this time but is placed in a separate column, the total of which will be debited to the "expense principal" account at the time the cash book is closed. (See Section 283 and Form 74, page 385.)

A memorandum journal entry is made stating the names of the appraisers appointed and the persons notified. (See Section 257.)

All the legitimate expenses of administering the estate, from the expenses of probate to those of the final accounting, are chargeable against the principal of the estate. Decision in each case as to what expenses are proper rests with the court, the necessity and reasonableness of expenses being presumed. Any interested person has the right to object to them and to state his reasons for objection. The character and the net amount of the estate are the controlling facts to be considered by the court. In general, everything will be allowed except disbursements for matters not directly connected with the business of the administration. For example, lunacy proceedings against a widow and sole legatee could not be paid for as an expense of administration. The executor is allowed an assistant or agent if necessary, but the executor cannot thereby relieve himself from personal responsibility. For a discussion of expense income, see Section 282.

263. *After-acquired assets.*—

Nov. 20, 1908. This receipt, which is now entered in the cash book represents to the extent of $5,000, the face value of the policy, an asset known at the time of death. (See "Schedule of Property Left by Testator," Section 254.) This asset will be recorded on the ledger as soon as the inventory is completed. (See Section 265); hence $5,000.00 of the receipt is credited to the "life insurance policy" account. The accrued dividends of $177.69 were not known at the time of death but they nevertheless existed at that time; accordingly the receipt of them is credited to "estate." The posting is not made at this time but the item is entered in a separate column, the total of which will be credited to "estate" at the time the cash book is closed. (See Section 284.)

It is rarely possible at the beginning of an administration to discover all the property of the decedent. Very often there are accrued interests of various sorts which are unknown to the executor until he begins to collect the assets. Sometimes an entire bank deposit will be unknown at the time the inventory is prepared. (See Section 269.) All the property that belonged to the deceased at the time of his death constitutes the principal of the estate; consequently any such property discovered after the books have been opened must immediately be credited to "estate."

264. *Funeral expenses.*—

Nov. 30, 1908. All of these payments are entered in the cash book, the $500.00 being debited to a "funeral expenses" account and the two others to "expense principal." It is desirable to have an account for funeral expenses because ordinarily all of them are not paid at one time. This account is closed into "estate" at the end of the administration. (See Section 284.) The premium on the bond and the expense of the advertising are proper administration expenses. (See Section 262.)

A memorandum journal entry is made reciting the signing of the court order requiring the advertising. (See Section 257.) It is convenient to paste a printed copy of the advertisement in the journal as a part of the memorandum entry.

These expenses are not debts of the testator because they were not contracted by him, but since public policy dictates that every deceased person should be buried in a way suited to his former station in life they are made preferred charges on the estate. The amount paid for funeral expenses is subject to the approval of the court, the law prescribing merely that it must be reasonable in view of the circumstances of the case. Where only the rights of legatees or next of kin are involved the rule is liberal, often to the extent of allowing a monument or tombstone. But where the rights of creditors might be prejudiced, the rule is strict; the funeral must be plain and there must be neither monument nor tombstone. Funeral expenses include not only the expenses of actual burial but also those of funeral services fitting to the station and religious faith of the deceased. They may also include a reasonable allowance for suitable mourning to be worn by relatives of the deceased. In one case where the estate did not exceed $500.00 the court held that funeral expenses of $829.50 were excessive and suggested that $150.00 would be a reasonable amount, stating that if the executor desired a greater display, he or the relatives should pay for it personally. As a rule, expenses of the last illness, are not given the preference accorded to funeral expenses but are treated as other debts of the testator. (See Section 244.)

265. *Inventory.*—

Dec. 11, 1908. A memorandum journal entry is made stating that the inventory has been completed and filed in court

and a journal entry is made opening the estate ledger. The amount of cash stated in the journal entry as on hand at the time of death is now entered on the first line in the cash book. (See Section 258.) This amount is not posted from the journal because it will be included in the total receipts by the executor which will be debited to "cash" when the cash book is closed. (See Section 283.) Nor is this amount credited to "estate" from the cash book because it is included in the total credited to "estate" from the opening journal entry.

The payment of $30.00 is entered in the cash book and debited to "expense principal" because it is a proper administration expense.

The laws of the several states vary as to inventory requirements. (See Section 240.) As a matter of practice, the inventory should be a complete list of all personal property left by the testator, classified in schedules and summarized. The schedules and summary should be prepared by the executor before the appraisal, the enumeration in the schedules of the articles of property being in the order in which they are to be found in the rooms of the house, or in some equally convenient order, so that the work of the appraisers who receive a per diem compensation will consist only in checking the inventory by physical examination of the assets and giving to each asset a value in dollars and cents.

In the inventory of this estate, the following matters deserve special mention. All twenty of the K. K. Bonds are included in the inventory and a notation made that ten of them are pledged at the bank. It is not sufficient to state only the estate's interest in the bonds after deduction of the $6,000.00 debt because the executor is entitled to commissions on the $6,000.00. (See Section 295.) For the same reason, the debt due

from C. D. is included although this debt is canceled by article fifth of the will. (See Section 253.) The contract for the purchase of the real estate is a real estate interest and therefore not included in the inventory, although the purchase price must be paid from the personal estate like any other debt. (See Section 268.) The contract for the sale of the real estate is included and valued at the balance due from the vendee since the selling price when received will form part of the personal estate instead of passing to the devisee, C. Y. to whom, by article sixth of the will (see Section 253), is given the real estate. (See Section 278.) The interest in the real estate held with E. F. is not included in the inventory because it is a real estate interest. (See Section 278.) The interest in the partnership with G. H. is stated as one of an unascertained value because there is no practical way of valuing it. In other situations the law suggests several means of valuing the interest of a partner in a firm's business, but since the executor of a deceased partner is entitled to an accounting from the surviving partners (see Section 281), the law requires him to state the interest of his testator only in the way mentioned, charging him later with the actual amount received from the partnership accounting. (See Section 281.) A memorandum ledger account need not be opened for this interest; consequently the interest is not included in the opening journal entry.

266. *Taxes.*—

Dec. 12, 1908. Both payments are entered in the cash book and debited to "debts of testator." These payments are not posted at this time but are entered in a separate column, the total of which will be debited to "debts of testator" when the cash book is closed. (See Section 283.)

Taxes upon both kinds of property are in theory debts due by the owners of the property to the government, although in practice the remedy to collect them may some times be confined to a sale of the property taxed without recourse to a personal action against the owner of the property. The debt is usually considered to arise at the date of the assessment of the tax; consequently taxes are debts of the testator if they were assessed before his death. Such debts are usually given preference over ordinary debts. (See Section 244.) As a rule there is no apportionment of taxes between principal and income, as they are regarded as absolute debts at the date of their assessment. (See Section 248.)

267. *Interest.*—

Dec. 31, 1908. Since the C. Trust Company deposit is inactive, it has a separate account in the ledger. (See Section 258.) Consequently a journal entry is made debiting the trust company and crediting the apportioned amounts to "estate" and "income."

Interest is apportionable between principal and income because it accrues from day to day. It is unlike dividends on stock. (See Section 258.) The interest here allowed by the trust company is apportioned as of Oct. 15, 1908, the date of death, that part of it which had accrued at that date, $116.67, being credited to "estate" as an after discovered asset. (See Section 261.) And that part which accrued after the date of death, $83.33, being credited to "income." (See Section 248.) For the apportionment of interest on savings bank deposits, see Section 269.

Jan. 2, 1909. All of these transactions are recorded in the cash book, the interest receipts being apportioned. (See Sec-

tion 267.) And the payment for the realty debited to "debts of testator." The proportion of the interest belonging to "income" is not posted at this time but is entered in a separate column, the total of which will be credited to "income" when the cash book is closed. (See Section 283.)

268. *Testator's contract to buy realty.*—When the testator entered into the contract to buy the realty, he intended to convert personalty, cash, into the realty. Upon the signing of the contract he incurred a debt to the amount of the contract price which debt he had paid in part at the time of his death. Had the debt been paid in full and the realty acquired by him during his life, the property would have passed to the devisee, C. Y., under article sixth of the will. (See Section 253.) The right under the contract to acquire the realty is an interest in the realty itself and therefore passes to C. Y. But the unpaid portion of the contract price is a debt and must be paid out of the personal property of the estate, thereby fulfilling the testator's intention to convert personalty into realty. C. Y. has a right to compel the executor to pay this debt and thereby enable C. Y. to demand a conveyance of the property to C. Y. from the vendor. Consequently this payment is debited to "debts of testator" and the property passes to C. Y., the devisee.

269. *Savings bank interest.*—

JAN. 6, 1909. Since this will be an inactive deposit it is not taken into the general cash of the estate. (See Section 258), but a journal entry is made debiting the savings bank and crediting "estate" with the original amount of the deposit, $1,000, and that part of the interest which had accrued at the time of death, $31.65, and crediting "income" with the balance of the interest, $8.35.

There is some conflict in the law as to whether or not the so-called interest on a savings bank deposit accrues from day to day and thus is apportionable. (See Section 267.) Some decisions maintain that a savings bank, strictly speaking, does not pay interest at all, but at the end of each fiscal period declares a dividend on the amount of deposits which have remained with it during the period, which dividend, like any other dividend, is not apportionable. (See Section 258.) This is evidenced, they say, by the facts that no rate of the so-called interest is announced at the beginning of the period, that no so-called interest at all need be allowed by the bank and that the deposit must remain with the bank during the entire period to entitle it to any such allowance. As a matter of practice in some states the inheritance tax assessors do not apportion the so-called interest but claim a tax only on the amount of the deposit with its accretions to the last "interest day" preceding testator's death. This, however, seems to be merely a rule of convenience since there is no assurance that the executor can or will allow the deposit to remain with the bank until the first "interest day" succeeding testator's death and thereby secure "interest" which can be apportioned. Where, as in our illustrative case, the tax is not assessed until the "interest" has actually been received there would seem to be no occasion for this rule of convenience. As a matter of legal principle, it seems difficult to distinguish the allowance made by savings banks upon its deposits from ordinary interest. It consists of a certain rate per cent of the deposit for the period of time the deposit has remained with the bank. The facts that the rate is not fixed until the end of the period and that no allowance at all need be made by the bank if it so decides do not affect the essential nature

of the allowance when it is made. Finally, the requirement of the bank that the deposit remain with it during the entire period to entitle it to any allowance seems to be only the result of an agreement between the bank and the depositor relating to the latter's right to collect the allowance from the bank; it does not bear on the question whether or not the allowance is in its nature interest. It would seem, therefore, that this allowance is interest and accordingly it has been apportioned as of the date of death. It would likewise be apportioned even though the inheritance tax were assessed and paid before the interest were received; if in that event, the interest were never received because the deposit was withdrawn before the right to collect the interest arose, a refund of the tax on the portion of the interest credited to "estate" could be secured.

JAN. 15, 1909. These payments are entered in the cash book, that for the repairs being debited to "expense principal" and that to S. T. being debited to S. T.'s account.

270. *Repairs to personal property.*—When in the executor's judgment repairs to personal property will facilitate its sale, the court will allow the executor credit for reasonable expenditures for that purpose. The expense of such repairs is a proper administration expense because it is necessary to the conversion of the furniture into cash for distribution. Therefore the payment for repairs is debited to "Expense Principal." (See Section 262.)

271. *Payment of legacies.*—See Section 245 for a general discussion of this subject. When the estate funds are sufficient and there is no doubt as to the estate's solvency, it is customary to pay to the legatees upon request advances on their legacies. Since legacies

are subject to deductions for the inheritance tax (see Section 274) the executor should deduct the amount of the tax from the payment to the legatee. In this instance, the payment of $3,000.00 on a legacy of $5,000.00 leaves an ample balance from which the tax can later be deducted.

272. *Sale of personalty.*—

JAN. 25, 1909. The $800 received from the sale of the furniture is entered on the cash book. Since the furniture is represented on the ledger as worth $1,000, its appraised value, there has been a loss on this sale of $200. The furniture account must be closed because all the furniture has been sold. This is accomplished by crediting the furniture with $1,000 from the sundries column of the cash book. The loss of $200 is debited to "estate," not at this time, but by entering the amount of the loss in a separate column of the cash book, the total of which will be debited to "estate" when the cash book is closed. (See Section 283.)

The payment of the auctioneer's fee is entered in the cash book and debited to "expense principal" because it is a proper administration expense. (See Section 262.)

The executor has a right to sell the personalty of the estate if such sale will facilitate the distribution of the estate. The sale usually may be either public or private. Before making such sale the executor should inform himself as to any law which may require a certain kind of sale or certain notices to interested persons. The executor is not responsible for loss on a sale if the sale is made in good faith and with ordinary prudence. Articles not necessary for the support and subsistence of the family and not specifically bequeathed must be sold first; articles specifically bequeathed must not be sold until the residue of the personal estate has been applied to the payment of debts. At such a sale the ex-

ecutor should not make purchases for himself without obtaining the court's permission, but if the sale is at auction and it is apparent that a material loss to the estate would result from a sale to an outsider, the executor may bid in the property.

278. *Testator's contract to sell realty.*—

MAR. 31, 1909. This receipt is entered in the cash book and credited to the "contract for sale" of "real estate" account.

When the testator entered into the contract to sell the realty, he intended to convert it into personalty, cash, Upon the signing of the contract, he secured an obligation on the vendee's part to pay him cash to the amount of the selling price and, in turn, the testator's title to the realty became subject to an obligation on his part to transfer it to the vendee upon receipt of the selling price. Had the selling price been received by the testator prior to his death, he would have transferred his title to the realty to the vendee and there would have been no interest in this realty to pass to C. Y., the devisee, upon the testator's death. But only part of the selling price had been received at the time of death; therefore the title to this realty remained in the testator, subject of course to the obligation under the contract to convey it to the vendee upon the receipt of the balance of the selling price, and this title passed at the time of death to C. Y., the devisee. C. Y., however, could receive nothing more than the testator had; therefore C. Y. took the land subject to the same obligation. The right to receive the balance of the selling price was personal property and therefore became part of testator's personal estate. C. Y. secured nothing of value when title to this realty passed to him. The executor had the right to compel C. Y. to convey his title to the ven-

dee upon the latter's paying the executor the balance of the selling price, thus fulfilling the testator's intention to convert the realty into personalty. The receipt of the $4,000 is credited therefore not to C. Y. but to the "estate" by crediting the account, which at the time of its creation had been credited to "estate." (See Section 265.)

274. *Inheritance tax.*—

April 1, 1909. This payment is entered in the cash book and debited to an account entitled "inheritance tax suspense."

The state usually levies a tax upon the passing of the real and personal property of a decedent. The theory of this tax may be that the tax is one for revenue only or that the state desires to encourage a person's leaving his property to his immediate relatives, since the tax upon transfers to immediate relatives, such as father, mother, husband, wife, child, brother or sister is nominal, if levied at all. In any event, the tax is levied not upon the property which passes but upon the passing itself of the property even though the property may be exempt from taxation. In New York, the tax is known as the transfer tax. The tax is usually some percentage, such as five per cent upon a total amount passing, exceeding, say, $500. It is due and payable at the time of the transfer, that is, at the time of death, and the executor is generally charged with the duty of paying it. The tax is borne not by the estate but by the persons who take the property under the will; consequently the executor must reimburse the estate by collecting from the persons who take the property the amounts of the taxes on their respective shares. A certain time, usually six months, is allowed the executor in which to have the tax assessed by the state officers and

in which to pay it. Ordinarily a discount is allowed the executor if the tax is paid within this time, while a penalty is attached if it is not paid within some longer period of time, as, for example, eighteen months from the date of death. To enable the executor to take advantage of the discount he is usually allowed to deposit with the tax officials within the time prescribed a sum sufficient to cover the tax.

The method of assessing the tax is a matter of law, not of accounting. The methods of calculating the tax vary among the several states. The general method of calculation, however, is to determine the tax upon each legacy and devise including the residue of the estate, the residue being estimated by deducting from the total assets the debts, funeral expenses, expenses of administration and executor's and trustee's commissions. When the tax is paid within the time entitling the executor to the discount, the benefit of the discount should be given to all persons paying any part of the tax. Otherwise the person receiving the residue of the estate would be enriched by the amount of the discount at the expense of the other beneficiaries. In this estate the executor has estimated that the tax will amount to about $11,000; accordingly he deposits this amount, subject to correction when the tax shall have been assessed.

275. *Loss by burglary.*—

July 2, 1909. These receipts for interest are entered in the cash book and credited to "income." There is no apportionment here between principal and income because the interest accrued after the date of death. (See Section 267.) The loss of these collections by the burglary is likewise entered in the cash book and debited to "income." For the books to ignore these transactions would be improper because the executor is

chargeable *prima facie* with the amounts collected and is entitled to commissions for having received them. (See Section 295.)

A memorandum journal entry is made stating in detail the circumstances in connection with the loss. (See Section 257.)

The liability of the executor for a loss such as this depends upon the care exercised in the protection of the funds. As said in Section 242, the executor must care for the assets of the Estate as diligently as he would if they were his own property. The executor will be required to make good the loss if he was guilty of negligence; otherwise he will not be charged with it. In the case of this loss, there has been no negligence because he exercised the "common or ordinary diligence which men of common prudence generally exercise about their own affairs." The estate money was placed in the safe together with the executor's personal cash and securities, temporarily, until it could be deposited in the bank. Since the money stolen belonged to "income," the loss of it is charged to "income" and thus does not fall upon the general assets of the estate.

276. *Sale of bonds.*—

JULY 7, 1909. No single cash book entry can conveniently record this transaction; hence a journal entry is used, debiting the D. Trust Company with the amount of the deposit, the "debts of testator" account with the $6,000.00 debt paid and the "estate" account with the $500, lost on the sale of the bonds and crediting the K. K. Bonds account with $10,000, the par value of the bonds sold. The trust company deposit is to be inactive; accordingly it is not included in the cash account. (See Section 258.) The loss on the sale of the bonds is debited to "estate" to correct the credit to that account for the par value of the bonds based upon the inventory appraisal. (See Section 265.)

277. *Loss by bank failure.*—

AUG. 14, 1909. A journal entry is made closing the account with the D. Trust Company and opening a new account entitled "D. Trust Company Suspense." This is necessary so that the estate ledger will not show as a good asset a deposit which is admittedly a doubtful one.

If the bank in which the deposit is made be one in good standing and there be nothing to lead a reasonably prudent man to hesitate to deposit his personal funds in it, the executor will not be charged with a loss through the failure of the bank. But he will be charged if there be no necessity for making the deposit or if he deposit money when there is a duty to disburse the money at once. He will be charged also if he make the deposit under an agreement to let it remain a certain length of time or if he may through the exercise of reasonable prudence have ascertained the bank's unsoundness. If the deposit be made in his individual name without the designation of his fiduciary character he is absolutely liable, regardless of any other fact. (See Section 242.)

278. *Special payments and ventures.*—

AUG. 16, 1909. These payments are entered in the cash book, the first and last being debited to "debts of testator." The second is debited to "expense principal" because it is a proper administration expense. (See Section 262.)

AUG. 30, 1901. A memorandum journal entry is made recording this receipt and the payment of it to C. Y.

Where money has been invested by the testator on a single special real estate venture with another person, ordinarily no partnership has been created, the parties being merely tenants in common. Consequently the interest of the testator in this venture is a real estate

interest and passes to C. Y., who is entitled to this receipt of $6,400. The receipt by the executor of this amount was due to his misunderstanding of the law. In his hands the sum constitutes what is known technically as an independent trust for the benefit of C. Y. and it does not form any part of the estate assets. The executor should pay it over to C. Y. immediately, making only a memorandum journal entry of it upon the estate books. Although part of the $6,400 consisted of rents collected after the testator's death, these rents do not form part of the estate income because the realty was not an estate asset. If any part of the rent had accrued prior to the date of death, such part would belong to the principal of the estate. Some states construe "accrued" as "due and payable" and thus in effect do not apportion rent in the same way that interest is apportioned. (See Section 267.)

279. *Payments on the trust.*—

Oct. 1, 1909. This receipt is entered in the cash book; it is credited to "income" because the dividend was declared after the testator's death. (See Section 258.)

Oct. 30, 1909. This payment is entered in the cash book; it is debited to an account entitled "trustee, income" because it is a partial payment of the income due to the trustee under the legacy in the will. (See Section 253.)

Under article seventh of the will, the legatee is not G. R., the life tenant, or E. W., the remainder man, but M. N. as trustee. Therefore, the only payments on this legacy which M. N. as executor can lawfully make are to himself as trustee. He should open with himself as trustee an account to which he should debit the assets set aside to constitute the trust fund (see Section 248), or any advances made to either bene-

ficiary under the trust. Since the executor in his accounting must distinguish principal from income, his books should show on which account payments to beneficiaries are made. Further, to avoid the labor of analysis that would be entailed on the accounting if only one trustee account be kept for both principal and income transactions, two trustee accounts are created, one for transactions with principal and one for transactions with income. These accounts are operated like accounts with other legatees (see Section 251). M. N. as executor need take no receipt from G. R., since G. R. has no status in the administration of the estate. As trustee, however, M. N. should take credit on his trusteeship books (see Section 251) for the payment to G. R., which payment should be properly evidenced by G. R.'s receipt.

280. *Inheritance tax payment.*—

Nov. 15, 1909. The total receipt on account of the tax deposit, $5,157.60, and the receipt of $237.50 from the C. Trust Company are entered in the cash book, the former being credited to "inheritance tax, suspense" and the latter to the "C. Trust Company." The payment of the renewal premium on the bond is entered in the cash book and debited to "expense principal." (See Section 262.)

For a discussion of the inheritance tax see Section 271. The taxes on the gifts to C. Y. and C. D. could not be deducted from payments made to them by the executor because the gift to C. Y. consisted of real estate and books and that to C. D. of the cancellation of a debt due by C. D. to the testator. Consequently the executor collected from them the amount of the taxes on their gifts. These amounts together with the refund by the tax officials of the excess of the executor's

deposit over the tax as assessed are credited to the suspense account, leaving in that account the amount paid by the executor for taxes on the general and demonstrative legacies. For the ultimate disposition of this amount, see Section 288. Since, by article fourth of the will, the legacy to E. W. is payable from the C. Trust Co., the payment of the tax on his legacy, which is, in effect, an advance to him, should be made from the C. Trust Co.; accordingly the executor withdraws the amount of the tax from the C. Trust Co. and therewith reimburses his general cash out of which the tax had originally been paid by having been included in the $11,000.00 deposit.

281. *Decedent's interest in the partnership.*—

Nov. 30, 1909. The receipt from the D. Trust Company is entered in the cash book in the same way that the receipt from the sale of the furniture was entered. (See Section 272.) The receipt from G. H. is entered in the cash book and credited to "estate."

For a discussion of the executor's liability for a loss by bank failure, see Section 277. Since there is no liability in this instance, the loss is debited to "estate."

A partnership is dissolved by law upon the death of a partner, the assets of the partnership passing to the surviving partner or partners subject to an obligation to dispose of them in winding up the business and to account to the estate of the deceased partner for his share in the partnership property, including the goodwill. The executor is charged with the duty of seeing that the partnership is properly wound up and that the surviving partner or partners render to him a proper accounting. The interest of the deceased in the partnership venture is of course an asset of the estate and belongs to the principal thereof, since that interest

although not exactly determined at the time of death nevertheless existed at that time. In this instance the $1,000 received by the executor is in realization of that interest; consequently it belongs to principal and is credited to "estate" although it may consist in part of profits earned by the surviving partner in the process of liquidating the partnership business. As a rule, the executor has no authority to interfere with the surviving partner in the liquidation of the partnership business although he has a right to compel him to use proper and fair means in such liquidation.

282. *Expense income.*—

DEC. 2, 1909. This payment is entered in the cash book and debited to "expense income" by being placed in a separate column, the total of which will be debited to that account when the cash book is closed. (See Section 283.)

Expense income consists of the expenses of collecting, managing and distributing the income. Taxes on personal property during administration are properly included in such expenses because the income is being earned by this property. It is proper that the persons entitled to the benefits of the property should bear the expense of preserving it. Other examples of expense income are collection fees and brokerage fees on changes of investments. See also Section 296. For a discussion of expense principal, see Section 262.

283. *Entries preceding preparation of executor's account.*—

DEC. 24, 1909. This payment is entered in the cash book; it is debited to "expense principal" because it is a proper administration expense. (See Section 262.)

DEC. 31, 1909. A journal entry is made charging the C. Trust Company and crediting "income" for the interest of $400.

There is no apportionment here because the entire amount of interest accrued after the date of death. (See Section 267.)

The payment of the stationery bill is entered in the cash book; it is debited to "expense principal" because it is a proper administration expense. (See Section 262.)

JAN. 5, 1910. A journal entry is made debiting the Savings Bank with $40.00 and crediting this amount to "income." There is no apportionment here because this interest accrued after the date of death. (See Section 267.) The other interest receipts are entered in the cash book; they also are credited to "income" for the same reason.

The preparation of the executor's account for presentation to the court is discussed in Chapter XXIV. Preceding this preparation, the executor should credit all legatees, except himself as trustee, with the amounts of their legacies. The accounts with himself as trustee should not be credited at this point because the amount to be given to himself as trustee is the amount remaining after the estate has otherwise been entirely distributed and this amount can not be determined until after the final accounting, as will appear in Chapter XXIV. He should then close the nominal accounts and pay all legacies that can conveniently be paid. Finally he should prepare a trial balance which will show the assets on hand and the amounts due to the trustee as principal and income respectively. The details of his procedure are as follows:

A journal entry is made crediting C. D. with $1,000.00, C. Y. with $2,000.00 and S. T. and E. W. with $5,000.00 each, the amounts respectively of their legacies, and debiting the total of $13,000.00 to "estate," this being a distribution in part of the capital or ownership account.

The inheritance tax paid by the executor is now charged against the various legatees as advances made to them. This

is done by a journal entry debiting S. T. with $237.50, debiting E. W. with $237.50, debiting "trustee, principal" with $5,367.40 and crediting "inheritance tax suspense" with the total of $5,842.40, which closes the "suspense" account. These are the amounts of the taxes on the legacies to S. T. and E. W. and on the estimated residue which will be given to the trustee. (See Section 274.) No part of the tax on the residue is chargeable to "trustee income," because only property existing at the time of death is taxed.

The accounts of the legatees other than C. D. now show credit balances representing the amounts due them on their legacies. C. D.'s account is closed since his legacy canceled the debit in his account representing the debt due by him to the testator. Having thus determined the amounts due the legatees, the executor pays these amounts in cash or property according to the terms of the will.

The asset of books is now delivered to C. Y. and a journal entry made debiting him with its appraised value, $2,000.00, and crediting the "books" account. The balance due E. W., $4,762.50, is paid him from the C. Trust Company, a journal entry being made to debit him with this amount and credit the C. Trust Company. The balance due S. T., $1,762.50, is paid him from the general cash, an entry being made in the cash book debiting his account with this amount.

The executor now closes his cash book, which shows a balance on hand of $13,543.39. This balance is carried forward to reopen the cash book for recording such cash transactions as occur after the executor's account has been approved by the court. The cash book may be closed as often as convenient; in large estates it may be desirable to close it monthly. From the debit side of the cash book, the total receipts are debited to "cash," the total income credited to "income," the total gain on realization credited to "estate" and the total loss on realization debited to "estate." The items in the sundries column having been posted individually, nothing is done with the total of that column. From the credit side of the cash book, the total payments are

credited to cash, and the total expense principal, expense income and debts of testator are debited to those accounts respectively. The total of the sundries column is ignored for the same reason that the corresponding total on the debit side of the cash book was ignored. Journal entries are now made closing the nominal accounts by debiting "estate" with the expense principal, funeral expenses and debts of testator and debiting "income" with expense income.

A trial balance of the estate ledger is now taken. This may conveniently be put in the journal. It shows that the assets remaining on hand including the advances made to the trustee on account of principal and income amount to $122,340.79, which is the total of the amounts at present due to the trustee on account of principal and income as shown by the estate and income accounts respectively. With the books in this condition, the executor is now ready to prepare his final account for presentation to the court.

LEDGER OF THE ESTATE OF W. R., DECEASED

Estate

1909				1908			
July 7	Loss on R. R. Bonds	J	500 00	Oct. 15	Inventory	J	137,750 00
1910							
Jan. 5	Sundry Legacies	J	13,000 00	Oct. 16	Xy Dividend	C	5,250 00
" 5	Loss on Realization	C	700 00	Dec. 31	C Trust Co. Interest	J	116 67
				1909			
" 5	Sundry Expenses	J	15,616 90	Jan. 2	A. B. Mtge. Interest	C	145 83
" 5	Balance		115,946 60	" 2	K. K. Coupons	C	291 66
				" 6	Savings Bank	J	1,031 65
				Nov 30	Partnership Liquidation	C	1,000 00
				1910			
				Jan. 5	Gain on Realization	C	177 69
			145,763 50				145,763 50
1910				1910			
Jan. 5	Expense, Final Accounting	C	250 00	Jan. 5	Balance		115,946 60
" 5	Executor's Commission	C	1,611 85				
" 5	Trustee, Principal	J	114,084 75				
			115,946 60				115,946 60

Form 75—Ledger

LEDGER OF THE ESTATE OF W. R., DECEASED

Income

1909				1908			
July 2	Loss by Burglary	C	750 00	Dec. 31	C Trust Co. Interest	J	83 33
1910				1909			
Jan. 5	Sundry Expenses	J	200 00	Jan. 6	Savings Bank Interest	J	8 35
" 5	Balance		6,394 19	Dec. 31	C Trust Co. Interest	J	400 00
				1910			
				Jan. 5	Savings Bank Interest	J	40 00
				" 5	Sundry Cash Receipts		6,812 51
			7,344 19				7,344 19
1910				1910			
Jan. 5	Interest to S. T. and E. W.	J	54 38	Jan. 5	Balance		6,394 19
" 5	Executor's Commissions	C	75 98				
" 5	Trustee, Income	J	6,263 83				
			6,394 19				6,394 19

Cash

1910				1910			
Jan. 5	Sundry Receipts	C	40,872 79	Jan. 5	Sundry Disbursements	C	27,329 40
				" 5	Balance		13,543 38
			40,872 79				40,872 79
1910				1910			
Jan. 5	Balance		13,543 39	Jan. 5	Sundry Disbursements	C	13,543 39

Form 75—Continued

LEDGER OF THE ESTATE OF W. R., DECEASED

C Trust Company

1908 Oct. 15	Inventory	J	10,000 00	1909 Nov. 15	Tax on E. W's Legacy	C	237 50
Dec. 31	Interest	J	200 00	1910 Jan. 5	Cash on E. W's Legacy	J	4,762 50
1909 Dec. 31	Interest	J	400 00	" 5	Balance		5,600 00
			10,600 00				10,600 00
1910 Jan. 5	Balance		5,600 00	1910 Jan. 5	Interest on E. W's Legacy	J	35 69
				" 5	Trustee, Principal	J	5,560 31
			5,600 00				5,600 00

D Trust Company

1909 July 7	Deposit	C	3,500 00	1909 Aug. 14	Transfer to Suspense %	J	3,500 00

D Trust Company, Suspense

1909 Aug. 14	Transfer from D Trust Co.	J	3,500 00	1909 Nov. 30	Cash and Loss in Liquidation	C	3,500 00

Form 75—Continued

LEDGER OF THE ESTATE OF W. R., DECEASED

SAVINGS BANK

1909 Jan. 6	Deposit and Interest	J	1,040 00	1910 Jan. 5	Balance		1,080 00
1910 Jan. 5	Interest	J	40 00				
			1,080 00				1,080 00
1910 Jan. 5	Balance		1,080 00	1910 Jan. 5	Trustee, Principal	J	1,080 00

WWI

X Y STOCK

1908 Oct. 15	Inventory	J	75,000 00	1910 Jan. 5	Trustee, Principal	J	75,000 00

K K BONDS

1908 Oct. 15	Inventory	J	20,000 00	1909 July 7	Sale to Second National Bank	J	10,000 00
				1910 Jan. 5	Balance		10,000 00
			20,000 00				20,000 00
1910 Jan. 5	Balance		10,000 00	1910 Jan. 5	Trustee, Principal	J	10,000 00

FORM 75—Continued

LEDGER OF THE ESTATE OF W. R., DECEASED

A B Bond and Mortgage

1908 Oct. 15	Inventory	J	10,000 00	1910 Jan. 5	Trustee, Principal	J	10,000 00

Life Insurance Policy

1908 Oct. 15	Inventory	J	5,000 00	1908 Nov. 20	Cash	C	5,000 00

Contract for Sale of Realty

1908 Oct. 15	Inventory	J	4,000 00	1909 Mar. 31	Cach	C	4,000 00

C. D.

1908 Oct. 15	Inventory	J	1,000 00	1910 Jan. 5	Legacy	J	1,000 00

Books

1908 Oct. 15	Inventory	J	2,000 00	1910 Jan. 5	C. Y. on Legacy	J	2,000 00

Clothing

1908 Oct. 15	Inventory	J	750 00	1910 Jan. 5	Trustee, Principal	J	750 00

Form 75—Continued

LEDGER OF THE ESTATE OF W. R., DECEASED

Furniture

1908 Oct. 15	Inventory	J	1,000 00	1909 Jan. 25	Sale	C	1,000 00

Expense, Principal

1910 Jan. 5	Sundry Cash Disbursements	C	1,816 90	1910 Jan. 5	Estate	J	1,816 90

Expense, Income

1910 Jan. 5	Sundry Cash Disbursements	C	200 00	1910 Jan. 5	Income	J	200 00

Funeral Expenses

1908 Nov. 30	Cash	C	500 00	1910 Jan. 5	Estate	J	500 00

Debts of Testator

1909 July 7	Second National Bank	J	6,000 00	1910 Jan. 5	Estate	J	13,300 00
1910 Jan. 5	Sundry Cash Disbursements	C	7,300 00				
			13,300 00				13,300 00

Form 75—Continued

LEDGER OF THE ESTATE OF W. R., DECEASED

Inheritance Tax, Suspense

Date			Amount	Date			Amount
1909 April 1	Cash Deposit	C	11,000 00	1909 Nov. 15	Refund and Collections	C	5,157 60
				1910 Jan. 5	Distribution to Legatees	J	5,842 40
			11,000 00				11,000 00

Trustee, Principal

Date			Amount	Date			Amount
1910 Jan. 5	Inheritance Tax	J	5,367 40	1910 Jan. 5	Legacy	J	114,084 75
" 5	Cash	C	6,327 04				
" 5	Sundry Assets	J	102,390 31				
			114,084 75				114,084 75

Trustee, Income

Date			Amount	Date			Amount
1909 Oct. 30	Cash Advance to G. R.	C	1,000 00	1910 Jan. 5	Legacy	J	6,263 83
1910 Jan. 5	Cash	C	5,263 83				
			6,263 83				6,263 83

Form 75—Continued

LEDGER OF THE ESTATE OF W. R., DECEASED

S. T.

Date			Amount	Date			Amount
1909 Jan. 15	Cash	C	3,000 00	1910 Jan. 5	Legacy	J	5,000 00
1910 Jan. 5	Inheritance Tax	J	237 50				
" "	Cash	C	1,762 50				
			5,000 00				5,000 00
1910 Jan. 5	Cash	C	14 69	1910 Jan. 5	Interest on Legacy	J	14 69

E. W.

Date			Amount	Date			Amount
1910 Jan. 5	Inheritance Tax	J	237 50	1910 Jan. 5	Legacy	J	5,
" "	Cash	J	4,762 50				
			5,000 00				5,
1910 Jan. 5	Cash	J	39 69	1910 Jan. 5	Interest on Legacy	J	39 69

C. Y.

Date			Amount	Date			Amount
1910 Jan. 5	Books	J	2,000 00	1910 Jan. 5	Legacy	J	2,000 00

FORM 75—Continued

CHAPTER XXIV

FINAL ACCOUNTING

284. *Accounting.*—In the summary of the executor's work made in Section 249, it was pointed out that at the end of his administration the executor must render an accounting to the court of his appointment. Ordinarily this accounting is the only one, and is called the "final accounting"; and upon it and on the basis of it, the executor's accounts are said to be "judicially settled." But where the administration is prolonged or where special circumstances make it advisable, the executor may voluntarily render or he may be compelled to render one or more intermediate accounts. Further, no accounting is absolutely final, and not infrequently there are several so-called final accountings in the administration of one estate.

285. *Effect of accounting.*—An accounting, whether it be intermediate or final, is conclusive only as to matters stated in it and only as to persons legally notified of it. Consequently, if after an accounting it be discovered that the executor has failed to account for an estate asset, or that a person interested in the estate was not legally notified of the accounting and thereby suffered an impairment of his rights, the executor may be called upon to render a further accounting. The matters as to which an accounting is conclusive in the absence of fraud or gross inaccuracy can be summarized as follows:—

1.—That the executor has charged himself with all the money and property that was collectible at the time of the accounting;
2.—That the increases and decreases in the estate assets are correctly calculated;
3.—That the executor has charged himself with all interest for which he was legally accountable;
4.—That payments made to creditors, legatees or next of kin, and for administration expenses are correct.

286. *Time of accounting.*—An intermediate account may be filed voluntarily at any time; a final account may be filed voluntarily at any time after the expiration of the period allowed for the administration of the estate. The circumstances under which a compulsory intermediate or final account may be ordered are prescribed by the laws of the several states. The ordering of such an account is commonest where the executor fails to account voluntarily at the expiration of a reasonable time after the period allowed for administration. An account can commonly be ordered, also, for the benefit of a creditor or a legatee whose claim or legacy has not been paid.

287. *Procedure in accounting.*—The usual procedure is to present the account to the court with a petition that it be allowed. Thereupon the court notifies all persons interested in the estate that on a fixed day the account will be judicially considered. Prior to that day, the account on file with the court is open to inspection and on the day named the court will entertain objections to it. After examining the account and considering any objections raised against it, the court renders a decision allowing or refusing to allow the account. If the account is not allowed, one satis-

factory to the court must be presented; when an account is allowed, the court renders a decree of distribution directing the executor to make a certain prescribed distribution of the estate assets then remaining in his hands.

288. *Form of account.*—The form of the account is seldom prescribed. Generally, the law only states broadly what the account shall show. In practice, however, each state has a form which, with the approval of the court, has become customary. These forms vary from a simple statement of cash receipts and disbursements, such as that used in Ohio, to the elaborately analyzed form used in New York. Where there is a customary form, the executor should use it to facilitate the handling of the account by the court and the examination of it by interested persons. In our illustration the New York form is adopted.

289. *Vouchers for the account.*—The executor is usually required to append to the account an affidavit that to the best of his knowledge and belief it contains a full and true statement of all the estate assets that have come or should have come into his possession or control and his disposition of them. Vouchers for payments are usually required except for small payments not exceeding $20.00 individually and $500 in the aggregate, if they are supported by his uncontradicted oath of payment. If a voucher be lost, the executor is allowed to prove the payment by some other means. Vouchers, however numerous, must ordinarily be filed in court with the account.

290. *M. N.'s account.*—The New York form of account consists of a summary of the charges and credits, supported by schedules of the details and by certain affidavits. The summary is shown in this section; the

schedules are omitted because they contain nothing of accounting interest and the affidavits are omitted because they are matters of legal form and thus beyond the scope of these chapters. In Section 291 the composition and the sources of the figures in the summary are given.

SUMMARY OF ACCOUNT

First, as to Principal:

I CHARGE MYSELF WITH:		
Inventory	$137,750.00	
Increases, per Schedule "A"	8,013.50	
Total Charges		$145,763.50
I CREDIT MYSELF WITH:		
Loss on Sales, per Schedule "B"	200.00	
Loss on Bank Failure, Schedule "B"	500.00	
Decrease in Inventory, Schedule "B"	500.00	
Debts not Collected, Schedule "B"	1,000.00	
Inventory Unsold, Schedule "B"	95,750.00	
Funeral and Admin. Exp., Schedule "C"	2,316.90	
Debts of Testator, Schedule "D"	13,300.00	
Advances to Legatees, Schedule "E"	17,367.40	
Total Credits		130,934.30
Leaving a Balance of Cash of		14,829.20
Leaving a Balance of Property per Schedule "B" of		95,750.00
Total Balance of Principal		110,579.20

Second, as to Income:

I CHARGE MYSELF WITH:		
I CREDIT MYSELF WITH:		
Income Received, per Schedule "A1"		7,344.19
Loss of Income per Schedule "B1"	$ 750.00	
Expenses of Income, Schedule "C1"	200.00	
Advances to trustee, Schedule "E1"	1,000.00	
Total Credits		1,950.00
Leaving a Balance of Cash of		5,394.19

291. *Explanation of summary.—*

Separation as to principal and income.—The executor must distinguish his receipts and disbursements

between principal and income. The clearest way to do this is to have one summary for principal and another for income. The supporting schedules may conveniently be designated by the same letters, those for income being distinguished by the number "1" added to the letter.

Inventory.—This figure is the first credit in the estate account on the ledger.

Increases per Schedule "A."—These increases are the other credits in the estate account. They should be listed in detail in Schedule "A."

Total charges.—This figure is the sum of the credits in the estate account.

Loss on sales per Schedule "B."—This figure is the total of the "loss on realization" column of the cash book except the loss by the failure of the D. Trust Co. Losses should be listed in detail in Schedule "B."

Loss on bank failure per Schedule "B."—This is not a loss on a sale and therefore it is stated separately in the summary. The particulars of the loss should be stated in Schedule "B."

Decrease in inventory per Schedule "B."—This figure is the amount of the loss on the forced sale of the K. K. Bonds. It appears as a debt in the estate account and the particulars of it are found in the journal entry. These particulars should be stated in Schedule "B."

Debts not collected, per Schedule "B."—This figure is the amount of the debt due by C. D. Schedule "B" should state the reason why it was not collected; that is, that it was canceled by the legacy to C. D.

Inventory unsold per Schedule "B."—The amount of this item is determined by a comparison of the inventory, or the opening journal entry which contains

the items of the inventory, with the trial balance before accounting. Such comparison shows that the following assets listed in the inventory remain on hand:

Clothing	$ 750.00
X. Y. Stock	75,000.00
K. K. Bonds	10,000.00
A. B. Bond and M'tg'e	10,000.00
Total	$95,750.00

These assets should be listed in detail and the executor's reasons for not selling them should be stated in Schedule "B." The inactive bank accounts are considered as cash in the account, although for bookkeeping convenience they were not included in the cash account on the ledger.

Funeral and administration expenses per Schedule "C."—This figure is the total of the debits in the ledger accounts bearing these titles. The details should be stated in Schedule "C." They can be found in the cash book.

Debts of testator per Schedule "D."—This figure is the total of the debits in the ledger account of this name. The details should be listed in Schedule "D."

Advances to legatees per Schedule "E."—This figure is the total of the debits in the legatees' accounts in the ledger, which are as follows:—

Trustee, Principal	$ 5,367.40
S. T.	5,000.00
E. W.	5,000.00
C. Y.	2,000.00
Total	17,367.40

Schedule "E" should state the amounts advanced to each legatee.

Balance of cash.—The total charges include inventoried assets other than cash, but the credits by Schedules "B" and "E" credit the executor with ad-

justments of those assets and with such of those assets delivered to legatees or not sold by the executor. Consequently the difference between the total charges and the total credits is the amount of cash on hand belonging to principal. It is composed of the following items:

C. Trust Company	$ 5,600.00
Savings Bank	1,080.00
General Cash to balance	8,149.20
Total	$14,829.20

Sometimes the details of the cash balance as above are stated in the summary but that does not seem necessary.

Balance of property per Schedule "B."—Since the executor has taken credit by Schedule "B" for the inventory unsold, he must now charge himself with it because it constitutes part of the estate assets remaining on hand. Credit for this item was included in the summary in order to state the balance of cash on hand.

Total balance of principal.—This figure is the balance of the estate account shown by the trial balance before accounting, $115,946.60, less the advance to the trustee on account of it, $5,367.40, or $110,579.20.

Income received per Schedule "A1."—This figure is the total of the credits in the income account in the ledger. The details of this figure should be stated in Schedule "A1."

Loss of income per Schedule "B1."—This figure is composed of the debits in the income account representing these losses. The details of the losses and the explanations of them should be stated in Schedule "B1."

Expenses of income per Schedule "C1."—This figure is the total of the debits in the expense account in the ledger. These expenses should be shown in detail

in Schedule "C1." The detail can be found in the cash book.

Advances to trustee per Schedule "E1."—This figure is the total of the debits in the ledger account entitled "trustee, income." The details of the advances should be stated in Schedule "E1."

Balance of Cash.—This figure is the balance of the income account shown by the trial balance before accounting, $6,394.19, less the advance to the trustee on account of it, $1,000.00, or $5,394.19.

Proof of cash balances.—The amount of general cash stated in the first summary as belonging to principal, $8,149.20, and the amount of cash stated in the second summary as belonging to income, $5,394.19, equal the total general cash on hand, $13,543.39, as shown by the trial balance before accounting.

292. *Decree of distribution.*—The decree of distribution in the hypothetical case is not shown here because it is a matter of legal procedure and thus beyond the scope of these chapters. It directs the executor to make the following distribution of the estate assets remaining in his hands:—

He is to retain for himself $250.00 for the expenses of the accounting and $1,687.83 for his commission;

He is to pay to S. T. and E. W. interest at 6 per cent from November 15, 1909, to January 5, 1910, on their legacies;

He is to pay to himself as trustee $6,327.04 to apply on the balance due as principal and $5,263.83 in satisfaction of the balance due as income;

He is to deliver to himself as trustee all the remaining assets in satisfaction of the balance due as principal.

For convenience in these chapters, the distribution is recorded on the executor's books as of January 5, 1910,

the date of the presentation of the account, although in practice the distribution could not be made until the decree of distribution had been rendered by the court. This decree might be rendered on the day the account was presented to the court if the executor had secured from all interested persons signed approvals of the account and waivers of their rights to be notified of its presentation. When such approvals and waivers are not secured, the length of time after the presentation of the account before the decree of distribution can be rendered varies among the several states.

The following sections describe the bookkeeping necessary in connection with the distribution directed above and give any necessary explanations of rules of law involved in the distribution.

293. *Expenses of accounting.*—The payment of $250.00 is entered in the cash book and debited to "estate" because it is a proper administration expense. Since there are so few entries to be made at this stage, the nominal accounts are not re-opened, and accordingly, this payment is debited directly to "estate" instead of to a new "expense principal" account.

294. *Allowance to executor.*—The allowance to the executor for these expenses is made by the court at the time of the accounting and consequently can not be included in the account itself as a disbursement made by the executor prior to the accounting. The law fixes certain amounts to be allowed and gives the court some discretion in making further allowances.

295. *Commissions.*—The payment of $1,687.83 is entered in the cash book, $1,611.85 being debited to "estate" and $75.98 being debited to income. It is not necessary to open a commissions account in the ledger, because the total amount of the commissions and the

distribution of it between principal and income are shown in the cash book.

Commissions are usually a fixed percentage of the amount of the estate assets received and disbursed. The New York scale of commissions, which has been used in this hypothetical estate, is 5 per cent on the first $1,000.00, 2½ per cent on the next $10,000.00 and 1 per cent on the balance. Commissions are allowed not only on cash received and disbursed but also on the inventoried value of the estate assets except such assets as are specifically bequeathed. Commissions are not allowed on specific legacies. The theory of commissions is that they are for both receiving and distributing, one-half of them being for receiving and one-half for distributing. Accordingly, if certain assets were received by the executor but were lost during the administration and consequently could not be distributed by the executor, they would be included among the total assets received in the computation of one-half of the commissions, but excluded from the total assets distributed in the computation of the other half of the commissions. Examples of such losses are that of $500.00 by the failure of the D. Trust Co. and that of $750.00 by the burglary. When there has been a loss on the sale of an inventoried asset, such as the $200.00 loss on the furniture and the $500.00 loss on the K. K. bonds, the amount of the loss is deducted from the inventoried value of the asset as a correction of that valuation in the light of later experience. Accordingly, the asset is considered as having been received and delivered at its sale value and the one-half of the commission for receiving is not computed on the basis of its inventoried value. In the computing of commissions, principal and income must be considered together because otherwise

the first $1,000.00 and the next $10,000.00 would appear under both principal and income and the computation of the commissions would be excessive. Part of the expense of commissions, however, must be borne by income, and the fairest method of fixing the amount is to pro rate the total commissions in the ratios that the receipts and disbursements on account of principal and income bear to the total receipts and disbursements. Commissions are not charges against the legatees as are inheritance taxes but are paid like any other administration and income expense and accordingly fall upon the residuary legatee, who receives what remains of the estate assets after the expenses, the debts and the other legacies are satisfied. As commissions are not payable until they have been determined by the court, the executor has no right to retain money on account of them prior to the accounting, but he may protect his own interests by retaining until the accounting assets are of sufficient value to satisfy his claim for commissions.

When there are both an executor and a trustee, whose functions are distinct, each is entitled to commissions but the trustee's commissions must not be confused with those of the executor. In our hypothetical estate, M. N.'s commissions as executor have been determined; in a subsequent accounting by M. N. as trustee commissions will be allowed him as trustee for receiving and distributing the residue of the estate assets and the income from them which he as executor has turned over to himself as trustee.

296. *Interest on legacies.*—(See Section 245.)

Interest to S. T. and E. W.—A journal entry is made debiting "income" with the total interest allowances and crediting the legatees with their respective amounts.

The payment to S. T. is entered in the cash book and debited

to S. T. The payment to E. W. is made from the C. Trust Company; accordingly, the entry recording it is made in the journal.

The interest is calculated from one year after the issuance of letters testamentary to the date of the payment of the legacies. It is a proper charge against income because the income has been increased by the executor's retention of cash which should have been paid to the legatees at the expiration of one year from the issuance of the letters.

297. *Closing entries.*—A journal entry is now made closing the "estate" and "income" accounts by transferring their balances to "trustee, principal" and "trustee, income" respectively. The residue of the estate has now been determined and nothing remains to be done but to deliver to the trustee the remaining estate assets of which it is composed.

298. *Payments to trustee on principal.*—The payment of $6,327.04 is entered in the cash book and debited to "trustee, principal" and a journal entry is made debiting "trustee, principal" with the total of the remaining assets other than the general cash and crediting the accounts representing those assets.

299. *Distribution of assets.*—The assets other than cash form a part of the residue of the estate and belong to the principal of the trust because they were in existence at the time of death. The inactive bank accounts include accretions on account of income in the amounts of the interest on the deposits after the time of death but since there is sufficient general cash to pay the amount due on income, it is not necessary to divide the inactive bank accounts by paying to income out of them such part as represents interest and paying the balance to principal. Accordingly, the inactive bank accounts are

turned over to the trustee as principal. But the total of the assets other than the general cash is not enough by $6,327.04 to satisfy the total amount due as principal to the trustee as shown by the credit in his ledger account of the former balance of the estate account. Therefore, enough general cash is given the trustee to balance his account as to principal.

300. *Payments to trustee on income.*—The payment of $5.263.83 is entered in the cash book and debited to "trustee, income." The cash book is now closed and the total payments are credited to the cash account in the ledger. There is now no balance in any ledger account and all the ledger accounts should be ruled off as finally closed.

301. *Conclusion.*—The administration is now completed. The executor should present to the court vouchers showing that he has made the final distribution directed by the court and should have his executor's bond canceled. He then assumes his duties as testamentary trustee, entering into entirely new relations with the court and the beneficiaries under the trust.

302. *Journal of the estate of W. R. deceased.*—

Oct. 15, 1908.

W. R. died this day leaving no widow or children surviving him.

Oct. 16, 1908.

Will read. I am named as executor and testamentary trustee. I notified the Life Insurance Company of the death of W. R. and opened an account in the 1st National Bank in the name of "The Estate of W. R., Deceased, by M. N., Executor," the bank agreeing to transfer to the credit of the new account the balance of $9,000.00 now standing to the credit of W. R. upon my serving the bank with a certified copy of my Letters Testamentary. I filed a petition for the admission of the will to probate.

Nov. 16, 1908.

Will admitted to probate and Letters Testamentary issued to me.

Will	recorded,	L. 869,	p. 201.
Decree	"	, L. 184,	p. 162.
Letters	"	, L. 297,	p. 172.
Bond	"	, L. 442,	p. 185.

Nov. 17, 1908.

J. S. and H. J. appointed appraisers for Inventory and due notice of appraisal sent to C. Y., S. T., E. W., and C. D. Order of appointment filed.

Nov. 30, 1908.

Order signed by judge this day directing me to insert a notice once in each week for six months in the *Journal* and the *Globe* requiring all persons having claims against W. R. to present the same to me. I directed said papers to insert the following notice:

[COPY OF NOTICE]

Dec. 11, 1908.

Inventory completed and copy with my oath attached filed in court. Opened the Estate Ledger as of Oct. 15, 1908, with the following entry based on the Inventory:

	CASH	$ 9,000.00	
2	C TRUST COMPANY	10,000.00	
3	X. Y. STOCK	75,000.00	
3	K. K. BONDS	20,000.00	
3	A. B. BOND AND MORTGAGE	10,000.00	
3	LIFE INSURANCE POLICY	5,000.00	
4	CONTRACT FOR SALE OF REALTY	4,000.00	
4	C. D.	1,000.00	
4	BOOKS	2,000.00	
4	CLOTHING	750.00	
4	FURNITURE	1,000.00	
1	ESTATE		$137,750.00

Dec. 31, 1908.

2	C TRUST COMPANY	200.00	
1	ESTATE		116.67
1	INCOME		83.33
	Interest for six months to date apportioned between Principal and Income as of the date of death, Oct. 15, 1908.		

Jan. 6, 1909.

3	SAVINGS BANK	1,040.00	
1	ESTATE		1,031.65
1	INCOME		8.35
	Deposit with one year's interest to 12/31/'08 discovered this day. Interest apportioned between Principal and Income as of the date of death, Oct. 15, '08.		

July 2, 1909.

(Detailed description of loss by burglary, stating particularly the precautions taken to keep the money safe and the reason why the money was not deposited at once, i. e., that it was received after banking hours. Description also of executor's own property stolen, to show that executor used the same care in keeping estate funds that he used in keeping similar funds of his own.)

July 7, 1909.

2	D TRUST COMPANY	3,500.00	
5	DEBTS OF TESTATOR	6,000.00	
1	ESTATE	500.00	

3	K. K. BONDS		$10,000.00
	Second Nat'l Bank this day sold the ten K. K. Bonds pledged to it, the sale realizing, net, $9,500.00, out of which the bank collected its claim of $6,000.00 and remitted to me $3,500.00 which I deposited in the D. Trust Company. The loss of $500.00 on the bonds is charged to Estate.		
	Aug. 14, 1909.		
2	D TRUST COMPANY, SUSPENSE	$ 3,500.00	
2	D TRUST COMPANY		3,500.00
	D Trust Company this day suspended payment.		
	Aug. 30, 1909.		
	Received from E. F. $6,400.00 in liquidation of testator's interest in the real estate venture, the property having sold for $12,000.00 and the rents accruing since his death having amounted to $800.00, in both of which testator had one-half interest. I turned E. F's check over to C. Y., the devisee, by endorsement without recourse and made no entry on the Estate books other than this journal entry.		
	Dec. 31, 1909.		
2	C TRUST COMPANY	400.00	
1	INCOME		400.00
	Interest for one year ended this day.		
	Jan. 5, 1910.		
3	SAVINGS BANK	40.00	
1	INCOME		40.00
	Interest for one year ended 12/31/'09.		
1	ESTATE	13,000.00	
4	C. D.		1,000.00
6	C. Y.		2,000.00
6	S. T.		5,000.00
6	E. W.		5,000,00
	Above legatees credited with their respective legacies.		
6	S. T.	237.50	
6	E. W.	237.50	
6	TRUSTEE, PRINCIPAL	5,367.40	
5	INHERITANCE TAX SUSPENSE		5,842.40
	Above legatees charged with the taxes on their respective legacies, said taxes having been paid out of estate funds.		
6	C. Y.	2,000.00	
4	BOOKS		2,000.00
	C. Y. charged with books delivered to him in satisfaction of his legacy.		
6	E. W.	4,762.50	
2	C TRUST COMPANY		4,762.50
	Payment of the balance due on E. W's legacy.		
1	ESTATE	15,616.90	
5	EXPENSE, PRINCIPAL		1,816.90
5	FUNERAL EXPENSES		500.00

5	DEBTS OF TESTATOR		$ 13,300.00
	Above nominal accounts closed by being charged against the residue of the estate.		
1	INCOME	$ 200.00	
5	EXPENSE INCOME		200.00
	Expense Income account closed by being charged against the balance due on Income.		
	Trial balance before accounting.—		
1	ESTATE		115,946.60
1	INCOME		6,394.19
2	CASH	13,543.39	
2	C TRUST COMPANY	5,600.00	
3	SAVINGS BANK	1,080.00	
3	X. Y. STOCK	75,000.00	
3	K. K. BONDS	10,000.00	
3	A. B. BOND AND MORTGAGE	10,000.00	
4	CLOTHING	750.00	
6	TRUSTEE, ADVANCES A/C PRINCIPAL	5,367.40	
6	TRUSTEE, ADVANCES A/C INCOME	1,000.00	
		$122,340.79	$122,340.79

Jan. 5, 1910.

1	INCOME	54.38	
6	S. T.		14.69
6	E. W.		39.69
	Interest from 11/15/'09 to 1/5/'10 at 6% allowed by court to above legatees.		
6	E. W.	39.69	
2	C TRUST COMPANY		39.69
	Payment of interest on legacy.		
1	ESTATE	114,084.75	
1	INCOME	6,263.83	
6	TRUSTEE, PRINCIPAL		114,084.75
6	TRUSTEE, INCOME		6,263.83
	Trustee credited with amounts due him on Principal and Income respectively.		
6	TRUSTEE, PRINCIPAL	102,390.31	
2	C TRUST COMPANY		5,560.31
3	SAVINGS BANK		1,080.00
3	X. Y. STOCK		75,000.00
3	K. K. BONDS		10,000.00
3	A. B. BOND AND MORTGAGE		10,000.00
4	CLOTHING		750.00
	Trustee charged with above assets delivered to him in partial satisfaction of the balance due him on Principal.		

QUIZ QUESTIONS

(The numbers refer to the numbered sections in the text.)

CHAPTER I

INTRODUCTION

1. What is the purpose of an accounting system? What are the essential points to be considered in the installation of an accounting system?

2. In what respect are all accounting systems similar? In what respects do they differ?

3. Describe the initial method of procedure adopted by the accountant in the installation of any system.

4. Name the essential books of a concern doing a cash business and show the inter-relation of these books in the accounting of fiduciary concerns.

5. State the functions of the various books in use in a business whose transactions are on a credit as well as on a cash basis.

6. State the relation of the cost books of a manufacturing firm to the principal books of account.

7. In what respect, if any, do the books of public utility corporations differ from those of other industries?

8. In what respect, if any, do the accounting systems of public service corporations differ from all other systems?

CHAPTER II

BUSINESS OF A BUILDING AND LOAN ASSOCIATION

9. In what respect did the savings banks fail to meet the wants of the community, thus leading to the development of building and loan associations?

10. What are the distinguishing characteristics of a building and loan association, and in what respect does it differ from a savings bank?

11. What is the most common method of stock issue by a building and loan association, and how is it paid for? What value attaches to a share of stock?

12. Name the various plans of building and loan associations.

13. How many series of stock does the terminating plan comprehend and how does it work out?

14. What is the chief characteristic of the serial plan and how is it allied to the terminating plan?

15. In what manner is the permanent plan different from either the terminating plan or the serial plan?

16. What is the chief feature of the Ohio or Dayton plan and how does it resemble, and at the same time differ from, a savings bank?

17. Describe in detail the method adopted by building and loan associations with regard to granting loans.

18. Why do building associations grant larger loans, upon the same securities, than other financial institutions?

19. What are the most common methods of building associations in making loans? If the serial payments are applied to the reduction of the loan, how does the association derive an adequate return on its money?

20. What important features are enumerated in the

by-laws of the Reliance Building and Loan Association which the foregoing questions do not cover?

21. What formality must the applicant for a loan comply with?

22. Point out the principal features of the note the borrower is obliged to sign.

23. What is the method of calculation in order to arrive at the profit of a building association operating under the "terminating" plan?

24. In associations operating under other methods than the "terminating" plan, what forms of calculations are usually adopted for the equitable distribution of profits?

25. What arithmetical principal is involved in the distribution of profits under the partnership plan?

26. Based upon accounting principles, what objectionable feature is involved in distributing profits under the partnership plan? Under what circumstances would such a distribution prove also inequitable?

27. At what point in calculations does Dexter's rule depart from the partnership plan? How does it avert the inequitable features of the other plan?

28. Describe the Withdrawal plan commonly employed.

CHAPTER III

ACCOUNTING SYSTEM OF A BUILDING AND LOAN ASSOCIATION

29. Enumerate the operations of a building society in the conduct of its business. Why is a rigid supervision of its accounts essential?

30. What are the principal books used by a building society?

31. What details does a member's pass-book contain?

32. What entries appear in the member's roll book and with what other book entries does it correspond?

33. What entries are to be found on the debit side of the general cash book?

34. What are the chief columnar sub-divisions of the credit side of the general cash book?

35. What double purpose does the loan register serve?

36. In the preparation of a statement of assets and liabilities what items should be included?

CHAPTER IV

ACCOUNTING SYSTEM OF A BUILDING AND LOAN ASSOCIATION (CONTINUED)

37. What records are essential in the preparation of the annual report?

38. What ledger accounts are contained in the Statement of Assets and Liabilities of the Alliance Building and Loan Association?

39. Through what method of accounting practice is the grouping of the different cash receipts and disbursements attained?

40. What special features were embodied in the withdrawal plan of the Alliance Association?

41. What statements were included in the annual report to the members?

42. What are the duties of an auditor in the examination of the accounts of a building and loan association?

43. Of what items would a Statement of Receipts and Disbursements consist?

44. In the Statement of Assets and Liabilities the

item "accumulated profits $57,870.00," is based upon the average time the various series have run. What is the objectionable feature of this method of calculation, and why was it nevertheless adopted in this instance?

45. In tracing cash discrepancies what aim has the auditor in view?

46. What method of division of profits is adopted here? Is it always a fair method to adopt?

47. What is the net difference in the amount of the distribution of the profits according to Dexter's rule and the partnership method? Under what circumstances should any other than the prevailing method be adopted?

CHAPTER V

THE INSURANCE BUSINESS

48. Upon what law are all forms of insurance based? How are its operations explained?

49–50. How may an insurance company be formed in the State of Pennsylvania? What must the articles of agreement specify? What minimum par value must the stock have? What percentage of it must be paid in at the time of subscribing? How long must the books for subscription be kept open? What proportion of the capital stock must be subscribed for and paid in before the company may incorporate? What must be the minimum capital of a fire insurance company? A life insurance company? A health and accident insurance company?

51. In what forms of securities may the capital stock of an insurance company be invested?

52. In what forms of securities may the reserve funds be invested? If the law respecting investments is vio-

lated and a loss is sustained, who is held liable? Under what circumstances may an insurance company hold real estate?

53. With what legal regulations must an insurance company comply with respect to the payment of dividends? As to increase in capital stock?

54. What is the principal provision respecting the organization of a mutual company? When may an insurance company begin business? What are the provisions respecting the accumulation of a guaranteed capital?

CHAPTER VI

LIFE INSURANCE

55. What importance attaches to the mortality table in the business of life insurance? What tables are commonly in use in this country?

56. What is the significance of the mortality tables? What is the underlying principle of life insurance as regards the individual members?

57. What two plans of life insurance premiums are in general use? What are the advantages and disadvantages of the "natural premium plan"?

58. What premium plan do fraternal organizations use? What is the objectionable feature of it?

59. In what respect does the "reserve" or "level premium plan" differ from any of the others, and how does it operate?

60. Upon what rate of return on investments of reserve funds do life insurance companies calculate? Define a life insurance company's "surplus."

61. What is understood by "loading"? "Cost of insurance?"

62. What value attaches to a mortality table which also shows the reserve accumulation?

63. Explain the operations of this mortality table.

64. When is a life insurance company considered to be insolvent? Does the general ledger of a life insurance company show the amount reserved on every outstanding policy?

CHAPTER VII

ACCOUNTING SYSTEM OF A LIFE INSURANCE COMPANY

65. In what respect does the accounting system of an insurance company differ from that of mercantile companies?

66. Name the principal books used by an insurance company. Name some of the subsidiary books and their functions? How is the debit and credit side of the cash journal arranged?

67. Explain the importance of the general ledger of a life insurance company. Of what value are the control accounts of the subsidiary ledgers? Why?

68. Explain the methods and purpose of keeping policy holders' accounts by life insurance companies, (a) in the bookkeeping department, (b) in the actual department.

69. How is the amount of (a) policy holders' overdue premiums arrived at? (b) the company's investments? Name the subsidiary books kept in connection with investments.

70. What value attaches to the general ledger accounts of a life insurance company with respect to its annual report?

71. Under what principal divisions are the annual re-

ports of life insurance companies stated when filed with the various insurance commissioners?

72. In what important respects do these reports differ from the regular annual reports?

CHAPTER VIII

FIRE INSURANCE ACCOUNTING

73. What is the essential similarity of all insurance businesses? What are the principal books of a fire insurance company?

74. What is the most important difference between fire insurance and life insurance companies respecting premiums?

75. How are the earnings ascertained on (a) one year policies? (b) two year policies?

76. In what respect is a fire loss treated differently from a death loss by the different companies? What assets of fire insurance companies do the state insurance commissioners exclude?

77. When may a fire insurance company pay dividends?

78. How are the reserve of fire insurance companies calculated on (a) one-year policies, (b) two year policies, (c) three year policies?

79. State the principal accounts to be found on the books of a fire insurance agency.

80. As an agent for two companies, frame journal entries of receipts of premiums from sub-agents, and your commission on the insurance written.

81. Account for the differences in the items of the opening and closing of Balance Sheets.

CHAPTER IX

BANK ACCOUNTING

82. In what sense is bank accounting like that of life insurance accounting?

83. In what sense is a bank's capital identical with that of an insurance company?

84. What are the essential features of bank accounting?

85. What purposes does the daily statement of a bank serve?

86. What is the object of the continuous balance of depositors' ledgers?

87. What is the best method of preventing errors in the posting of the depositors' ledgers?

88. What means are commonly employed by banks against defalcations by its bookkeepers?

89. Describe the daily routine operations of a bank.

90. Name the origin of most of the entries in bank bookkeeping.

91. How does the receiving teller dispose of (a) gold, silver and bills, (b) route or hand items, (c) foreign checks, (d) exchanges, (e) cashier's checks? Through what medium is the depositor credited?

92. How may a debit to a depositor's account originate?

93. What is the nature of the notes that pass through the books of a bank? Formulate an entry (in journal form) on the bank's books of (a) demand loan, (b) "bills discounted" and "bills purchased."
payment of loan and interest. Distinguish between

94. When is the "Cashier's Checks" account (a) debited, (b) credited?

95. In what respect is a certified check different from an ordinary check?

96. What entry would a check returned "not good" require? Through what book of original entry would it be made?

CHAPTER X

BANK ACCOUNTING (CONTINUED)

97. In what important respect does the general ledger of a bank differ from that of a life insurance company?

98. What are the functions of the general journal in the accounting system of a bank?

99. State the columnar rulings of the "discount register" and how the daily summaries are posted.

100. What relation does the "discount tickler" bear to the "discount register"?

101. What is the purpose of a "collection register"?

102. What record does the "certified check register" supply?

103. What relation is there between the cashier's check book and the "cashier's check" account in the General Ledger?

104. From an examination of the balance sheets of the various banking institutions, which one's business activities are most comprehensive in character, and which are most strictly defined?

105. In the trial balance of a savings bank (a) what assets are common to the other financial institutions? (b) what assets are not? (c) what liabilities are common to all? (c) what liabilities are not?

106. In a savings bank audit what assets may be

verified (a) by a physical examination? (b) by documentary proof? (c) indirectly?

CHAPTER XI

BREWERY ACCOUNTING

107. In what respect are the accounts of a brewery in New York City unique and in what respects are some of the records common to all breweries throughout the United States?

108. What purpose does the "contract record" serve and to what general ledger accounts is it related?

109. What importance attaches to the "Goods Received Memo."?

110. What general ledger accounts are affected by entries made or omitted to be made on the "stock cards"?

111. From what different sources would (a) the debit entries, (b) the credits entries, affecting the "stock book," be collated?

112. What special feature attaches to the invoice book suggested and under what circumstances would its operation not be advisable?

113. Describe the operations of the "day sheet." How is the unrecorded shipment of goods prevented?

114. How does the sales book operate and what are its special features?

115. What is the method of billing and with what subordinate record does the result check?

116. What purposes does the collection sheet serve?

117. What are the chief columnar sub-divisions of the cash debit book?

118. Explain the relation between the collectors'

sheets, cash received book and ledgers. How are cash disbursements handled, and what are the chief columnar sub-divisions of the cash paid book?

119. What method is adopted here in the handling of cash receipts and payments in the absence of an imprest cash?

120. What is the peculiar feature of the customers' ledger?

121. In what respects does the sundry debtors' ledger differ from the customers' ledger?

122. What are the functions of the journal in brewery accounting?

123. Does the general ledger of a brewery contain every entry that is to be found in the subsidiary ledgers?

124. In what relation does the trial balance of a subsidiary ledger stand to that of the general ledger?

CHAPTER XII

THE DEPARTMENT STORE

125. Explain the fundamental feature in the organization of a department store.

126. What economic purposes do department stores serve?

127. What means do they adopt in centering public attention to their wares, and what are their methods in utilizing those means?

128. Because of what special reason have department stores an advantage over single-line stores in enlisting capital?

129. What important part does borrowed capital play in the organization of a department store?

130. Describe the financial operations of a department store managers looking to the enlisting of borrowed capital.

131. In serving a public want, what particular branch of the department store contributes to its success?

132. Describe the methods in use bearing upon department store purchases.

133. To prevent over-stocking or under-buying to what expenditures are department stores obliged to resort?

134. What different purposes does the branch office serve?

135. Upon what basis is the accounting system of a department store founded?

CHAPTER XIII

DEPARTMENT STORE ACCOUNTING

136. Into what departments is the "general office" divided? State the functions of each.

137. How are the departments organized?

138. What are the two primary functions of the bookkeeping department?

139. Give an outline of the routine attending the ordering of goods.

140. Explain the process observed in receiving goods and the reasons therefor.

141. In the auditing of purchases, point out the double checking feature of the original invoice figure.

142. Describe the manner of paying of invoices.

143. What system of identification of employés is commonly adopted?

144. With respect to sales, how are (a) cash transactions handled, (b) credit sales, (c) C.O.D. sales? What, if any, audit feature is lacking in connection with any of the selling methods?

145. In view of the great number of departments, employés, classes of goods handled, etc., what kind of audit can satisfactorily be performed in a department store?

146. How are the cash sales audited? In the process of this audit the work of what classes of employés is involved?

147. What is the purpose of the transfer sales card? Does it operate only with regard to cash sales?

148. Explain the functions of the balance report. What three classes of transactions does it embody? How are (a) shortages in cash treated, (b) surplus cash?

149. What double purpose does the cashier's report serve?

150. Describe the manner of auditing charge sales.

151. Explain the process of billing goods to customers? What bookkeeping and also auditing features are involved?

152. How are direct expenses and indirect expenses allocated to departments?

153. In what important respects would the annual report of a department store differ from or correspond to (a) building and loan association? (b) life insurance company? (c) fire insurance company? (d) bank? (e) brewery?

CHAPTER XIV

GAS ACCOUNTING

154. With what two-fold problems does gas accounting deal?

155. Name the principal books of a gas company.

156. For what reason is the general ledger of a gas company the most important book?

157. What useful purpose is served by the detailed classification of the general ledger entries?

158. In what respects are the methods of making purchases by a gas company (a) different from that of (1) a department store? (2) brewery? (b) Similar?

159. Through what method are gas companies enabled to keep fairly accurate book-inventories?

160. Describe method of invoice payments.

161. In addition to the income from the manufacture of illuminating gas, what other sources of income does a gas company have, and how are such sources of income availed of?

162. What do the following accounts on the books of a gas company denote (a) coke expense, (b) ammoniacal liquor expense, (c) tar expense? Of the systems studied what, if any, related accounts correspond to these?

163. Explain the method of handling (a) the expense in the preparation of the coke for the market, (b) valuation of the product, (c) sale of the product, (d) disposition of the difference between valuation and sales price of the product.

CHAPTER XV

GAS ACCOUNTING (CONTINUED)

164. What constitutes a gas company's basis for charges?

165. Explain the workings of the slot meters and how the proceeds of same are recorded in the books of the company by means of printed forms.

166. In what important essentials does the form recording the consumption of gas through regular meters differ from that of the slot meters?

167. Describe the operations of the Customers' Ledger.

168. What method exists in billing customers?

169. Explain the special features of the daily cash receipt book.

170. In what important essentials does the general cash book differ from the daily cash book? How are the revenue accounts handled?

171. Explain the method of posting the cash debits.

172. How is the time of outside workmen (a) recorded? (b) distributed? (c) how is the distribution checked?

173. Explain the method of posting the cash credits. How are the charges made to the different operating accounts, based upon the classification of the payroll?

174. What purposes do the monthly profit and loss statements serve? How are these statements prepared?

175. From the trial balance as well as other data presented, prepare (a) a manufacturing statement, (b) profit and loss statement, (c) balance sheet.

CHAPTER XVI

RAILROAD ACCOUNTING

176. State the primary sources of income of a railroad system.

177. State the secondary sources of income.

178. In the income derived from the transportation of passengers, what standard of charges prevails?

179. Name the principal classifications upon which freight charges are based.

180. In what respect does the accounting system of a railroad company express its relation with (a) the public? (b) "foreign" lines or its own lines operated separately? (c) its own organization?

181. Name the various departments of the Pennsylvania Railroad Company. What is the relation of the general department to the other departments? Under whose direction is the accounting department? Name the five auditors in the order of their importance.

182. What are the main classifications of passenger tickets? On what basis is passenger revenue figured?

183. Describe the routine followed in supplying station agents with passenger tickets.

184. What are the special features of the ticket invoices and the ticket ledgers?

185. Describe the various purposes of the agents' daily reports.

186. In what distinctive manner do the monthly agents' reports differ from daily reports?

187. Explain the method of apportioning revenue from passenger service between (a) constituent companies, (b) home and foreign companies?

188. Draft journal entries recording upon the rail-

road company's books and the net amount receivable from transportation of passengers.

189. How are conductors' cash collections handled and how are they recorded on the company's books?

190. State the reason for mutilating passenger tickets when lifted by conductors. How are these tickets (a) handled, (b) audited?

CHAPTER XVII

RAILROAD ACCOUNTING (CONTINUED)

191. What radical distinction exists between accounting for the receipts from passengers and that of freight earnings?

192. What furnishes the basis of charges for the transportation of freight? What simple method is employed in identifying the contents or destination of each loaded freight car?

193. By what indirect method is each station agent's receipts and shipments of freight checked?

194. State the two methods that prevail for accounting for way bills. What objection suggests itself against one of the methods?

195. Explain the process of checking way bills for freight charges, advances and prepayments.

196. What method similar to that of department store accounting is adopted by railroads in expeditiously and correctly handling the great volume of transactions?

197. Frame journal entries recording upon the railroad company's books the net asset receivable from the transportation of freight.

198. How are the cash receipts handled by a station agent when there are no banking facilities? How, if otherwise? Through what medium does the controller's account form a check upon the treasurer's receipts from station agents and conductors?

199. How is the accounting of station agents' receipts and disbursements accomplished?

CHAPTER XVIII

RAILROAD ACCOUNTING (CONCLUDED)

200. To what agency should the uniformity of railroad companies' expenditures be attributed?

201. Name the five general accounts to which all railroad companies' expenditures are chargeable? What is the primary purpose for the existing strictly defined classifications of expenditure?

202. What is understood by "primary accounts"?

203. Name the three general capital expenditure accounts.

204. When a capital expenditure is made otherwise than by direct payment of money, how is such expenditure recorded?

205. What method of making payments is in use among railroads? How are invoices for supplies handled?

206. Describe the course of an invoice for materials from its receipt to payment.

207. When materials are purchased for future use, what methods are employed in the handling of such materials?

208. Into what classes are the pay rolls divided? In what respects does the payment of payrolls differ from

that of department stores? What book entries does the treasurer's office make in connection with the pay-roll payments?

209. How are the payrolls analyzed?

210. Explain the manner of summarizing the various operating expenditures.

211. What is the final step in bringing the numerous expenditures upon the books?

212. Draft a journal entry for an overcharge on a freight shipment.

CHAPTER XIX

STREET RAILWAY ACCOUNTING

213. What is understood by the "zone" system in street-railway operations? State the underlying reason for the simplicity in the accounting of a street railway compared with that of a railroad.

214. Explain the value of cash registers in checking conductors' receipts.

215. What advantage is derived in the employment of "pay-as-you-enter" and "pay-within" cars (a) by the company, (b) by the company and the public?

216. Describe the various devices in use to insure the full return of the receipts by the street railway companies.

217. Explain the method of dealing with exchange tickets and transfers and the accounting for these.

218. What is understood in street railway operation by a "run," a "traffic peak," a "split-run"? What information for the auditors' office does the "conductors' way-bill" provide?

219. State the methods employed in recording the receipts as shown by the car-registers.

220. How are these receipts handled when collected? Which method is to be preferred? Frame journal entry recording a day's receipts.

221. To what other system of accounting do a street railway, (b) steam railway?

222. In what important essentials does the business of an inter-urban railway differ from that of (a) street railway, (b) steam railway?

CHAPTER XX

MUNICIPAL ACCOUNTING

223. Define a public corporation and the fundamental purpose for its creation.

224. What are the principal economic differences between a public corporation and any other corporation?

225. What radical accounting differences exist between these two classes of corporations?

226. As commonly used, what does the debit side of the cash book of a municipality show?

227. In what manner does the accounting of a public and private corporation differ as to (a) statements of assets and liabilities, (b) receipts and disbursements, (c) revenue and expenditure?

228. By what method does a municipality limit its expenditures? Are the appropriations always exhausted? How exceeded?

229. Name the principal accounting book of a municipality. How are the entries made?

230. Describe the method of summarizing the municipal expenditures.

231. Name some of the receipts of a municipality. How are they recorded?

232. What are the relations of the "fund ledger" to the "appropriation ledger"? What signifies the balance of the (a) appropriation ledger, (b) fund ledger?

233. In what respect does a municipal cash journal differ from an ordinary cash book?

CHAPTER XXI

EXECUTOR'S WORK

234. What is the prime qualification of an executor?

235. In what respect does the work of an administrator differ from that of an executor?

236. Define and differentiate the duties and appointments of an executor, administrator, and trustee.

237. What is a will? How is a will probated?

238. How does an executor qualify? Is an executor always obliged to furnish a bond?

239. What are (a) an executor's sources of authority, (b) an administrator's, (c) a trustee's?

240. What is the first important duty of an executor in taking charge of an estate? What property of decedent is not included in the executor's inventory? How about the decedent's debts?

241. What is meant by "discovery proceedings"?

242. State the responsibility of an executor with respect to the property in his care.

243. State the order of preference in the payment of debts, legacies, etc.

244. State the order in which the executor pays the debts of the estate. If the personal property of the

estate is not sufficient to pay all the debts, what remedy is open to the executor?

245. Define (a) general legacy, (b) specific legacy, (c) demonstrative legacy, (d) a residuary legacy. When are legacies payable? Do legacies bear interest?

246. What is meant by an executor's accounting? What does it show?

247. What compensation does an executor receive?

248. When does a testamentary trustee assume his duties? What is meant by "principal"? by "income"?

249. Give a brief summary of the detailed duties of an executor from the time he takes charge of an estate until its liquidation.

CHAPTER XXII

ESTATE BOOKKEEPING SYSTEM

250. What is the ultimate purpose of a system of estate bookkeeping?

251. State the method of dealing with the (a) testator's assets, (b) the testator's debts.

252. Name the necessary books of an executor.

253. What special provision did the testator make in his will respecting the executor?

254. In what class of property would the executor be concerned?

255. In the list of assets given name the first item of "income."

CHAPTER XXIII

ENTRIES UNDER SYSTEM

256. In what respect does a "memorandum" journal entry differ from a regular journal entry?

257. What is the purpose of memoranda journal entries?

258. What entries does the cash book contain?

259. What are the executor's powers prior to the insuance of letters testamentary?

260. How should an executor ear-mark funds of an estate? Why?

261. Why are dividends not apportioned between "principal" and "income"?

262. How are the expenses of administrating the estate charged?

263. State in brief what property constitutes the principal of the estate.

264. What determines the reasonableness of the amount of the funeral expenses?

265. How should the inventory be made up?

266. When are taxes charged (a) to principal? (b) to income?

267. Why is interest apportionable and not dividends?

268. How is the testator's contract to buy realty handled in the solution of the problem given?

269. In what respect does savings bank interest differ from interest income on bonds?

270. Under what circumstances will the court permit the expenditure of money for repairs of personal property?

271. When may the executor make advance payments to legatees?

272. State the order in which the executor may proceed in disposing of personal property.

273. State the principal under the amount realized from the sale of the real property.

274. How is the transfer tax handled in the books? By whom is it paid? To whom is it charged?

275. Is an executor personally responsible for losses by burglary? When is a burglary loss chargeable to "income" and when to "corpus"?

276. What are the proper entries when an executor sells bonds belonging to an estate?

277. Is an executor personally liable when the bank wherein he made estate deposits fails?

278. How are the miscellaneous payments of Aug. 16 (page 382) entered? Why should the money received for real estate sold Aug. 30 be given to C. Y.?

279. To what account should the executor debit dividends, paid on testator's stock? Why should two trustee accounts be created?

280. How should payments of inheritance tax be entered?

281. Is the interest of a deceased in a partnership venture an asset? If so, is it "income" or "corpus"?

282. What items constitute expense "income"?

283. What entries are to be made in the books of an estate by the executor preceding the preparation of his accounting?

CHAPTER XXIV

FINAL ACCOUNTING

284. What is meant by "final accounting"? What is the meaning of the term "judicially settled"?

285. Is a final accounting conclusive in every instance?

286. When is a final accounting to be filed?

287. What is the procedure in a final accounting?

288. Is there a prescribed form for the accounting by an executor?

289. Is an executor always required to append vouchers, when he renders the final accounting?

290. What is the New York form of accounting?

291. Consult the summary on page 421 and explain each item.

292. What is the decree of distribution and what does it direct?

293. To what account are the expenses for accounting debited?

294. Why cannot the allowance to the executor be entered as a disbursement?

295. How are the executor's commissions computed in New York State?

296. Why is the interest on legacies a charge against income?

297. What are the closing entries?

298–9. What are the entries for payments to trustee on principal, and for the distribution of assets?

300. How are payments to trustee on income entered?

301. What are the final acts of the executor?

INDEX